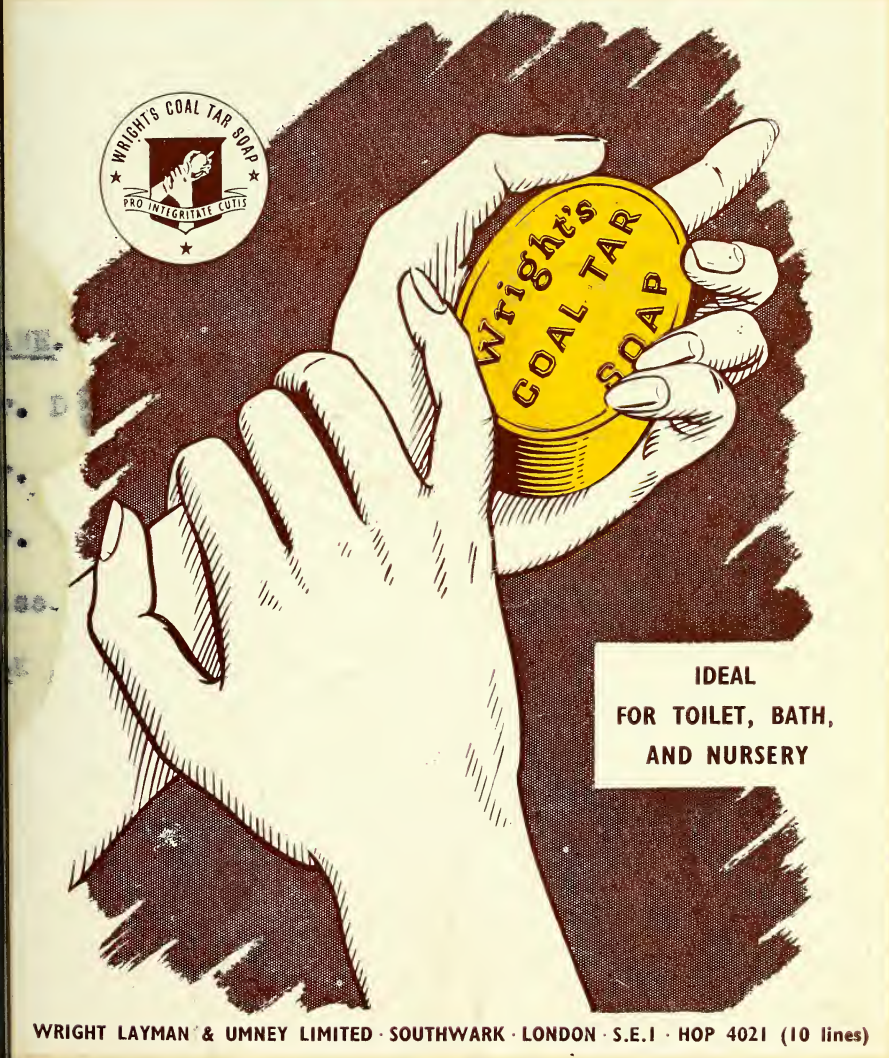
The
CHEMIST AND DRUGGIST
for RETAILER — WHOLESALER — MANUFACTURER
AUGUST 4, 1951



WRIGHT LAYMAN & UMNEY LIMITED · SOUTHWARK · LONDON · S.E.1 · HOP 4021 (10 lines)

Index to Advertisers pp. 5 & 6

Euthymol

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The
CHEMIST AND DRUGGIST
for RETAILER—WHOLESALER—MANUFACTURER
AUGUST 4, 1951
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Volume CLVI

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NEWS OF THE WEEK

New Pyrites Find.—A deposit of pyrites source of sulphur) has been found by eologists near Whitehaven, Cumberland.

Drug Tariff Price Revisions.—The Dertment of Health for Scotland has sued a list of revised prices from August of preparations included in section D of rt I of the Drug Tariff and of applinces included in section B of part II.

Savings Campaign.—From the beginning October until March 1952, the National vings Movement will be engaged in an tensive "Lend Strength to Britain" ive for more savings to help finance the armament programme and check the sing cost of living.

Emergency Storage Control. — The oard of Trade is to set up a small oranisation to provide, if necessary, for the mergency establishment of Control of actory and Storage Premises similar to nat which operated during the 1939-45 ar.

Deaf Aids Under N.H.S..—Addressing ne annual meeting of the National Initute for the Deaf, in London, recently, ne Minister of Health (Mr. Hilary Marquand) said that up to date 140,000 Medresco hearing aids had been supplied under the National Health Service. More than 100,000 patients remained on the waiting lists.

Scottish Statement on Price Maintenance.—In a statement issued recently the Scottish Chamber of Trade states that the proposals in the Government's White Paper on retail price maintenance are "not calculated to make any contribution towards reducing the cost of living and are more likely to create such chaos as to increase the cost of living considerably." They also consider that the standard of quality is likely to suffer greatly.

Chemistry Research Fund. — The Chemical Society states that applications for grants for chemical research will be considered in November and should be submitted not later than November 1. Applications from Fellows will receive prior consideration. Forms of application and regulations governing the award of grants may be obtained from the secretary of the Society, Burlington House, Piccadilly, London, W.1.

State Scholarships Regulations.—The Minister of Education has made regulations (S.I., 1951, No. 1214) which replace the existing bodies of regulations governin the award of State Scholarships and University Supplemental Awards. In future the latter are to be also known as State Scholarships, a candidate will no longer be required to attend a secondary school for at least two years immediately before taking the examination, awards are no longer to be restricted to British subjects.

Price Maintenance Facts Wanted.—The Board of Trade is asking trade associations and firms which have evidence of special circumstances in their industries that they would like the Government to consider before introducing the proposed legislation on Resale Price Maintenance to inform the Board of them. The Board does not want comment or arguments for or against resale price maintenance, but information on conditions in particular industries and trades which might cause difficulties should the White Paper proposals be adopted. Communications should be addressed to the Assistant Secretary, Board of Trade, I.M.1A Division, Thames House (N) Millbank, London, S.W.1.

Deputation on Prices of Sanitary Towels.—The Parliamentary Secretary to the Board of Trade (Mr. Hervey Rhodes), accompanied by the Parliamentary Secretaries to the Ministry of Health and the Scottish Office (Mr. Arthur Blenkinsop and Miss Margaret Herbison), met, on July 24, a deputation of women M.P.s on prices of sanitary towels. The deputation expressed concern at the rise in prices that had taken place in the previous twelve months, which Mr. Rhodes attributed to the higher cost of raw materials. He confirmed that the prices of sanitary towels were tightly controlled at the manufacturing and distributing stages by the Central Price Regulation Committee. It was agreed that it was important to maintain the quality of sanitary towels, the use of which had increased considerably, supplies being now about 75 per cent. more than pre-war.

B.P. Corrigenda.—The British Pharmacopœia Commission has issued a list of corrigenda to the Addendum to the 1948 British Pharmacopœia. The alterations, which come into force on September 1, include the following amended footnotes:—

Pp. 26, *lines* 28 *and* 29; 27, *lines* 18 *and* 19; *and* 28, *lines* 5 *and* 6: "When Injectio Streptomycini or Injection of Streptomycin is prescribed, Injection Streptomycini et Calcii Chloridi, Injection Streptomycini Hydrochloridi, or Injectio Streptomycini Sulphatis shall be dispensed."

P. 26, *lines* 28 *and* 29: "Injectio Streptomycini et Calcii Chloridi is incompatible with Injectio Streptomycini Sulphatis."

P. 28, *lines* 5 *and* 6: "Injectio Streptomycini Sulphatis is incompatible with Injectio Streptomycini et Calcii Chloridi."

Pp. 48, *lines* 13 *and* 14; 49, *lines* 28 *and* 29; *and* 50, *lines* 28 *and* 29: "When Streptomycinum or Streptomycin is prescribed or demanded, Streptomycini et Calcii Chloridum, Streptomycini Hydrochloridum, or Streptomycini Sulphas shall be dispensed or supplied."

Pp. 48, *lines* 13 *and* 14: "Streptomycini et Calcii Chloridum is incompatible with Streptomycini Sulphas."

P. 50, *lines* 23 *and* 24: "Streptomycini Sulphas is incompatible with Streptomycini et Calcii Chloridum."

Other alterations are as follows:—

P. 29, *line* 1; *for* "1.4" *read* "1.0"; *p.* 33, *line* 23; for "and rectified" read "and rectified if necessary"; *p.* 93, *line* 33; for "*allo trans*" read "all-*trans*."

Control of Dividends.—The Chancellor of the Exchequer announced in Parliament on July 26 that it was the intention of the Government to introduce, when Parliament reassembles in the Autumn, a Bill providing for the control of dividends during a period of three years. Under the Bill in the case of an existing company the annual amount which may be distributed by way of controlled dividends, including cash bonuses, will be (at the option of the company):—

(a) The average of the dividends paid in the last two accounting periods before July 27, in which a final dividend has been paid; or

(b) 5 per cent. of the relevant capital of the end of the period for which the controlled dividend is paid; or

(c) £10,000.

In the case of new companies the controlled dividends will be 7 per cent. of the relevant capital at the end of the period for which the controlled dividends are paid. Where a company has announced but not declared a final dividend before July 27, it will not be allowed to obtain an increased standard by paying a higher dividend than that announced. Details are contained in a White Paper (Cmd. 8318) published by H.M. Stationery Office, price 3d.

LOCAL NEWS

N.H.S. in Cheshire.—Payments to the 89 chemist contractors under the National Health Service in Cheshire for he year ended March 31, 1951 amounted o £709,147—a sum equivalent to 28.59 er cent. of the total cost of the Service n the county.

Long-service Men Honoured. — Mr. ames Woodside (manager of the chemical undries department, Scottish Co-operative Wholesale Society, Ltd.), and Mr. James Kinloch (assistant), were honoured by the lirectors at a gathering in the company's oardroom on July 17 on completion of ifty years' service.

Heriot-Watt Pharmacy Department.—The principal (Dr. H. B. Nisbet) speaking it the annual prize-giving at Heriot-Watt College, Edinburgh, recently, said that progress had been maintained in the building of the new block in the Grassmarket and t was confidently expected that the pharmacy department would be housed there in October.

Coal-tar-to-Aspirin Exhibit.—The chemicals pavilion at the Liverpool Daylight exhibition includes a combined display by Graesser Salicylates, Ltd., and Thompson & Capper Wholesale, Ltd., illustrating photographically stages in the manufacture of aspirin and demonstrating aspirin tablet manufacture on a rotary compressing machine.

P.A.T.A. Officer at Bexhill.—At a meeting of the Bexhill Chamber of Commerce held on July 17, Mr. A. A. Stead (advertising manager, Proprietary Articles Trade Association) gave an address on resale price maintenance. After discussion a resolution, pledging support in any action the National Chamber might take to safeguard the retention of the present system, was carried unanimously.

Training in Manchester Hospitals.—The board of governors of the United Manchester Hospitals has established three trainee posts, open to students who hold a University degree in pharmacy or the diploma of Pharmaceutical Chemist, but who require a period of practical training before admission to the Pharmaceutical Society's register. The posts are tenable for one year and will provide experience in the general work of a hospital pharmacy, including semi-scale manufacture of galenicals, tablets, and a wide variety of sterile products and injection solutions.

SPORT

Golf.—Manchester Chemists' Golfing Society, for Woolley trophy, on July 18, R. Demaine (78). Ladies' putting competition, Mrs. Kearns, Mrs. P. Stewart and Mrs. H. Brindle. Prizes presented by Mrs. G. S. Woolley. Vote of thanks proposed by Professor H. Brindle.

Edinburgh Chemists' Golf Club, at competition at Broomieknowe, No. 1 Section: 1, J. B. Grosset (10), 69; 2, A. H. Gillies (7), 70; 3 (a tie), J. Finlay (2), H. Semple (4) and A. E. Graham (7), 74. No. 2 Section: 1, R. C. Johnstone (18) 74; 2, H. Campbell (12), 76; 3, (a tie), A. Fulton (15) and A. Young (12), 78. No. 3 Section: 1, W. Meehan (21), 74; 2, W. J. McRitchie (24), 75; scratch, J. Finlay, 76.

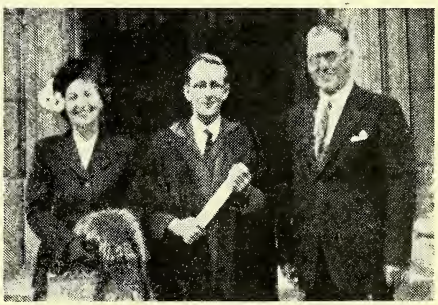
London Chemists' Golfing Society, Hadley Wood, Golf Club, Herts, on July 25. Medal competition for Burgoyne cup; R. Poole (12) 69 nett. Bogey competition for Professor Flint trophy: C. H. Maile (9), all square.

OUTINGS

London Sundries Firm.—The social club of Solport Brothers, Ltd., London, held a staff outing to Margate on June 23. A further visit is planned for September 8.

IRISH NEWS

Examination Results.—Of the twenty-seven candidates who sat for the July Assistants' examination of the Pharmaceutical Society of Ireland, the following were successful: Mary B. Aherne, Edmund P. Collins, Anne J. Corrigan, Elizabeth M. Curtin, Helena Eastwick, Sarah K. Keane, Finola M. Keegan, Bridget M. McCourt, Carmel T. McCrann, Brigid Murphy, Bridget Prendiville, Margaret M. O'Halloran, Mary P. O'Neill, Jane O'Shea, Nora C. Roche, Bernadette Walsh.



Mr. Philip A. Brady, T.D. (a member of Council, Pharmaceutical Society of Ireland, and immediate past-president) with his eldest son, Dr. Colm Brady, after the latter had received his degree in medicine at the National University of Ireland.

THE WEEK IN PARLIAMENT

By a Member of the Press Gallery, House of Commons

THE Minister of Health was asked by DR. BARNET STROSS whether his attention had been drawn to the fact that no supplies of cortisone were available in Stoke-on-Trent, when he hoped to find supplies, and when establish a centre there for the treatment of rheumatoid arthritis and allied diseases. MR. ARTHUR BLENKINSOP (Parliamentary Secretary to the Ministry of Health) in a written answer on July 26 replied that the small supplies of cortisone at present available did not enable the Minister to add to the hospitals already receiving the drug. The claims of Stoke-on-Trent would be considered when further supplies became available. He told BRIGADIER R. A. F. THORP the same day that the Minister would consider sympathetically any project designed to expand and cheapen production of ACTH in Britain. No application for a building licence for a manufacturing laboratory for that purpose had been made.

Supplementary Payment Considered

MR. ARTHUR BLENKINSOP told Mr. J. A. Langfort-Holt in a written answer on July 26 that it was estimated that the amount outstanding to chemist-contractors under the National Health Service at the end of June was of the order of £4,250,000. The Minister was considering whether a further supplementary payment could be made.

Cost of Inhalant

MR. GEORGE THOMAS asked, on July 26, whether the Minister of Health was aware that the purchase of Riddobron for use in hospitals cost the hospital service 60s. 11d. for 100 gm., whereas the British Pharmaceutical Codex alternative cost 4s. 6d. per 100 gm., plus the cost of five minutes' work by the pharmacist, and what action he proposed to take to encourage the use of the alternative. MR. BLENKINSOP replied: This is part of the wider problem of encouraging the use of standard rather than proprietary preparations. A committee of the Central Health Services Council is working on it and its findings are from time to time brought to the attention of hospital staffs.

Veterinary Research and Supplies

MR. T. WILLIAMS (Minister of Agriculture and Fisheries) told MR. E. B. WAKEFIELD, on July 26, that institutions at which research was being carried out on hard pad disease amongst dogs were the Wellcome Foundation and the Animal Trust. The Ministry's veterinary laboratory at Weybridge was also carrying out some research. He told MR. H. R. SPENCE on the same day that at present there was a temporary shortage of swine-fever crystal violet vaccine owing to the failure of two large batches of vaccine to pass tests. Other supplies would be available soon.

LEGAL REPORTS

£1,000 Damages to Carton Makers.—In an action brought in the King's Bench Division, London, before the Official Referee on July 13 by Popper & Co., Ltd., carton manufacturers, against Harry Green, Ltd., soap manufacturers, a sum of £1,110 was awarded to the plaintiffs, less £21 costs on a counter-claim. The hearing was concerned with contracts for the supply by the plaintiffs of cartons for Zee-kol soap, which defendants made for Shavex Zee-kol Co., and of cartons for Mary Drake soap. One-and-a-half million Zee-kol cartons were to be delivered over three to four months, but a delivery on April 16 was refused by defendants, wrongfully in the judgment of the Official Receiver. They had also repudiated the Mary Drake contract.

Wrong Product Alleged.—In the High Court, Dublin, on July 25, the settlement was announced of an action in which Mrs. Amelia Telford, Charlestown, Clara, Offaly, alleged that on November 18, 1949, she bought from Mr. Michael Pettit, Ph.C., Clara, Offaly, a bottle containing liquid described as "liquid cascara." The liquid supplied was not, she stated, liquid cascara, but extract of nux vomica, containing a proportion of strychnine, and after taking some of it on November 21 she became affected by strychnine poisoning and suffered from its after-effects. In his defence, Mr. Pettit denied Mrs. Telford's allegations and pleaded that all liquid cascara sold by him on November 18, 19 and 20, 1949, was part of a supply prepared and bottled by wholesale pharmaceutical chemists, and sold by him in the same condition as he had received it from them. Under the terms of the settlement, Mr. Pettit pays £480 without admission of liability.

TOPICAL REFLECTIONS

'enancy Problems

The Leasehold (Temporary Provisions) ct, 1951, introduces so much complica- on into the relations between landlords nd tenants that your editorial article on he subject on pp. 117-18 should be care- ully studied by owners as well as by ten- nts of business premises. Though it is npossible to mention all your valuable ints in my available space, I may note hat they deal chiefly with extensions of ases. Your readers will observe the fine gal distinctions set forth in your second aragraph on p. 117. They will also ob- rve, in your final paragraph on p. 118, he procedure to be followed when a con- ict of interest—I had almost written "of its"—arises between a landlord and a enant. There are good landlords who are illing to stretch a point on occasion; and here are good tenants who never press for oncessions to which they are not entitled. or such landlords and tenants the law ay well remain ensconced in Acts of Par- ament and in textbooks. But there are thers of both classes. It may, of course, be iggested that the shortest way to obviate ossible litigation between the parties is for tenant to become the owner of his pre- ises if he does not already own them. owever, a landlord may not be willing sell or may seek to impose unduly oner- us conditions.

ostscript to a Congress

A correspondent has been kind enough send me a copy of the current number "La Libre Pharmacie," containing a ven-page illustrated account of the anco-British Congress held at Brighton n May 18-21, and reported in THE HEMIST AND DRUGGIST of May 26. To ad about the event in this French report of great interest; I could have filled a . & D. page with quotations. In addi- on to what is known from the English ress, I learn from "La Libre Pharmacie" at Mr. H. B. Mackie, head of the School Pharmacy in Brighton Technical Col- ge, was presented with a copy of the w French Codex, and I have read the xt of Mr. Hugh Linstead's speech made French. Mr. Mackie's "sourire si bien- illant" and Mr. Linstead's "manière armante et pleine d'humour" are placed record. The account of the motor- ach excursion to Arundel and Worthing an admirable piece of descriptive writ- g—the kind of prose we seldom see in English. Some of your readers will like to know that the French rhythmical clapping of hands in applause (new, I believe, to many British members of the Congress) is known as "un ban d'honneur," and that the Banqueting Room of the Brighton Royal Pavilion, famed for its chandeliers and mural paintings, is described as "éblouissante et fantasmagorique." French pharmacists have, as a brief reference in Monsieur Gaudin's paper at the Congress showed, their own difficulties: this visit will strengthen the bonds that unite them with us.

Patriotic Soapmaking

The import-export balance in this country was troubling intelligent people two centuries ago. Thus it came about that "The Gentleman's Magazine" for August 1751 published an abstract of two letters in "The Gazetteer," signed "William Tew," on soapmaking. When we remember the smallness of the scale on which manufactures of many kinds were then carried on, the appearance of an article of this kind in a popular magazine is not so inappropriate as might on a first glance be thought. Mr. Tew (if that was the real name of the author) began with elaborate directions for ascertaining when, in the process of boiling, soap was of correct consistence. The operator was to take a bottle holding about four ounces, fill it with water, and divide the water into 128 parts. The division was made by ascertaining the weight of the bottle, balancing water and bottle against shot, and counting the shot. Samples of the soap were tested in the usual way with the aid of a knife. The next instruction—why did it not come first?—was a process for making ashes from "vegetables cut green": they were rated far above wood ashes. Green weeds were burnt on a brick hearth without allowing the fire to give a flame; lees of wood ashes were then sprinkled on. One bushel of these ashes was said to equal four bushels of wood ashes. A set of tables and calculations showed that soft soap thus prepared cost just over 3d. per lb. to manufacture; the best hard soap not only cost less, but would "answer all the uses" of soft soap in the ratio of one lb. to $1\frac{1}{2}$ lb. The final conclusion was that the use of "cake" soap would keep up the price of fat cattle; save at least £36,000 per annum in excise, and £70,000 in specie sent abroad for "pot-ashes." ***Xrayser***

COMPANY NEWS

Energen Foods Co., Ltd.—After transferring £20,000 to general reserve and adding £2,500 to reserve for research and development, the net profit is sufficient to pay 17½ per cent. (against 15 per cent.).

Imperial Chemical Industries, Ltd.—The following have been appointed directors as additions to the board:—Messrs. P. C. Allen (chairman, company's plastics division); E. A. Bingen (company's solicitor); Captain R. C. Todhunter, R.N. (Retd.) (purchases controller); and A. T. S. Zealley (chairman, company's Billingham division).

A. Boake, Roberts & Co., Ltd.—A final dividend of 12½ per cent. is proposed on ordinary shares making a total of 22½ per cent. for the year against a total dividend of 30 per cent. in the previous year. On the new 950,000 ordinary (bonus) shares of 5s. a similar final dividend is proposed. Net profit for the year ended March 31 is £528,722 (£338,975).

Barclay & Sons, Ltd.—The company has decided not to make dividend payments for 1950. Trading in the year ended December 31, 1950 showed a net loss of £3,666 (against £1,256 profit in the previous year). Mr. A. J. R. Whiteway (chairman), in a statement accompanying the accounts, reports that " . . . with the reduction in overhead expenses we have every reason to believe that we are now trading at a reasonable profit."

Griffiths Hughes Proprietaries, Ltd.—Discussing the reasons for the fall in dividend on the ordinary stock (7½ per cent. against 10 per cent. in the previous year) the directors report, which accompanies the accounts (see *C. & D.*, July 21, p. 70), states ". . . Vicious taxation, coinciding with the conversion of an important subsidiary from a local distributor of unadvertised unbranded lines to a national distributor of advertised branded lines, make it necessary to be somewhat conservative in our distribution this year."

New Companies

W. Heaney, Ltd. (P.C.).—Registered in Belfast. Capital £500. To carry on the business of chemists and druggists. Walter Heaney and Michael O'Kane, M.P.S.N.I., subscribers. First directors are not named. R.O.: 23 North Street, Lurgan.

Madaus Laboratories, Ltd. (P.C.).—Capital £1,000. To carry on the business of wholesale and retail chemists and druggists, analytical chemists, etc. Gregory Marcar and Ernest F. J. Perkins, directors. Solicitors: F. W. Perkins & Co., 39 Margaret Street, London, W.1.

Armside (Chemist), Ltd. (P.C.).—Capital £100. To carry on the business of manufacturing and dispensing chemists and druggists, etc. Henry Sidebotham, M.P.S., and Samuel Armitage, M.P.S., directors. R.O.: 25 Whitehall, London, S.W.1.

Frank Fisher & Co., Ltd. (P.C.).—Capital £100. To carry on the business of research and development in medical plastics, manufacturing suppliers, wholesalers, retailers, importers and exporters of and dealers in orthopædic appliances and general hospital supplies and equipment, etc. Martin Frank and Thomas W. Fisher, directors. R.O.: 18 Hatton Garden, London, E.C.1.

R. F. Linklater, Ltd. (P.C.).—Registered in Edinburgh. Capital £1,000. To acquire the business of a retail pharmacy and that of retail dealers in surgical, toilet and other goods carried on by the representatives of the late Robert F. Linklater at 147 Paisley Road West, Glasgow, S.W.1. Mary F. Linklater, Frederick F. Linklater and Barbara Kerr, M.P.S., directors.

BUSINESS CHANGES

Mr. P. J. Crowley, M.P.S.I., is opening a pharmacy at 207 Decies Road, Ballyfermot, Dublin.

Mr. K. Orlans, M.P.S., has acquired the pharmacy of L. W. Mussell, Ltd., 390 Aigburth Road, Liverpool, 19.

Dover & District Co-operative Society, Ltd., have transferred their pharmacy from 2 to 67 Biggin Street, Dover.

Jamieson Chemists (Edmonton), Ltd., are opening a branch pharmacy at 26 North End Parade, West Kensington, London, W.14.

Mr. H. Jones (North Wales representative, Ayrton, Saunders & Co., Ltd.) has removed to Rosehill, Victoria Road West, Prestatyn.

Mr. J. Prendergast, M.P.S., has acquired the pharmacy at Gateacre Brow, Woolton, Liverpool, formerly conducted by Mr. K. Orlans, M.P.S.

Mr. G. W. Poisson, formerly manager, Torpoint branch pharmacy, Plymouth Co-operative Society, Ltd., is returning to his native Mauritius.

DEATHS

ALLISON.—In a Carlisle nursing home, recently, Mr. Joseph William Woodman Allison, M.P.S. Mr. Allison qualified in 1899 after serving his apprenticeship with the late Mr. W. Robinson, Main Street, Cockermouth, Cumberland, whose business he eventually took over. Mr. Allison's two pharmacist sons (John Robert Woodman, and Joseph Eric) are continuing the business.

CAIRNS.—Suddenly, on July 29, Mr. Arthur Cairns, M.P.S., 75 Comely Bank Avenue, Edinburgh, 4, aged fifty-seven. Mr. Cairns qualified in 1917, after studying at the Royal Dispensary School of Pharmacy, Edinburgh, and then spent two years as an Army dispenser in Egypt. He was later in business for himself at 71 Warender Park Road, Edinburgh, for sixteen years. In 1936 he was appointed an inspector under the Pharmacy and Poisons Act, 1933, covering the East of Scotland and North-east of England. For many years he was an office-bearer in the Edinburgh Chemists' Assistants' and Apprentices' Association and, when he was appointed inspector, he had been for over ten years secretary of the Edinburgh and South-eastern Scottish Branch of the Pharmaceutical Society.

HUTCHENS.—At King's Lynn, Norfolk, on July 7, Mr. Hugh Pashley Hutchens, M.P.S., aged seventy-three. Mr. Hutchens qualified in 1904 and joined the staff of Allen & Neale (Chemists), Ltd. (then Allen & Neale), High Street, King's Lynn, where he remained until his retirement in 1946. He served latterly as the company's managing director.

NETHERWAY.—On July 24, Mr. John Netherway, Exbourne, Chislehurst, Kent (a past-secretary and vice-chairman, Allen & Hanburys, Ltd., London), aged seventy-nine. Mr. Netherway joined the company in 1894, serving at first for six years as private secretary to the directors. He was then appointed secretary to the company, and four years after obtaining his Fellowship of the Chartered Institute of Secretaries in 1902 was made a director. In 1944 he was appointed vice-chairman of the company. He retired from the secretaryship in 1945 and from his directorship a year later.

PICKLES.—On July 8, Mr. Frank Pickles, M.P.S., 56 King Edward's Drive, Harrogate, Yorks, aged seventy-eight.

PERSONALITIES

MR. P. C. CAHILL, M.P.S.I., 25 Wasdale Park, Terenure, Dublin, has recovered from a recent illness and intends to resume editorship of "Current News."

MISS E. M. R. RUSSELL-SMITH, who recently addressed a meeting of pharmacists at Lewes (*C. & D.*, July 21, p. 75), is an Under-Secretary at the Ministry of Health, and not as previously stated.



FIFTY YEARS WITH COMPANY.—Mr. G. Ruler (transport manager) and Mr. A. Britchford (chief engineer) who have each completed half a century of employment with Thos. Christy & Co., Ltd.

MR. S. DURHAM, M.P.S. (secretary, Sheffield Branch, Pharmaceutical Society) provided information for an article that appeared in the local Presss on July 19 "Pharmacy: a Career for your Child."

MR. C. J. RYE retired on June 30 from the position of sales manager for forty-five years with Evans Medical Supplies, Ltd. For many years Mr. Rye travelled in New Zealand, Australia, South Africa and the Mediterranean area.

WILLS

MR. P. C. EDMUNDS, M.P.S., 8 Canon Street, Barry, Glam, left £2,945 (£2,124 net).

MR. E. G. GOODBODY, Longmead, Foxrock, co. Dublin (chairman of St. Dalmas (Ireland), Ltd.), left £74,657.

MR. E. H. JONES, M.P.S., 30 Liscard Village, Wallasey, Ches, left £14,798 (£13,833 net).

MR. H. A. SPOUSE, L.D.S., 34 Cambridge Road, Hastings, dental surgeon, left £10,196 (£8,525 net). Mr. Spouse qualified as a chemist and druggist in 1905.

TRADE NOTES

Display Cabinet.—Fred Hurtley, Ltd., Keighley, York, have made available to dealers a stock/display cabinet which displays a wide range of Litesome products.

Again Available.—The Parisian hair fixative Gomina Argentine is again available in Britain through the sole distributors Henri L. Jaccaz & Co., 32 Shaftesbury Avenue, London, W.1.

Exterminator for Ants. — On another page, X-terminators, Ltd., 5 Coventry Street, London, W.1, direct attention to a new product, Ant-X, which is described as "an odourless syrup, attractive but deadly poisonous to ants."

Motherhood Guide.—The seventh edition (pp. 104) of a booklet "Motherhood," price one shilling, has been issued by Cow & Gate, Ltd., Guildford. In fifteen chapters are covered various aspects of hygiene, feeding and babycraft. The booklet is available for sale through chemists.

Photographic Contest Prize-winners.—The first three prize-winners for June in the photographic contests for amateurs organised by Dufay-Chromex, Ltd., Elstree, Herts, were:—*Pets:* R. V. Roberts, Harpenden, Herts; *People:* Thomas Hamilton, Netherton, Lanarks; *Places:* J. H. Hardman, Sutton Coldfield. Each received £50.

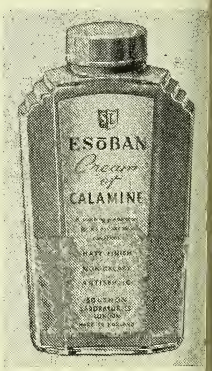
Anti-mastitis Weapon. — Gascoignes (Reading), Ltd., Reading, offer in their product Lacto-San ($C_{16}H_{33}$ $(CH_3)_3N$ Br.) a method of controlling mastitis in cattle. The method attacks the mastitis bacterium (*Streptococcus agalactiæ*) on hands, clusters, teats and udders. A descriptive leaflet is available from the company.

Training in Optics.—The School of the Institute of Optical Science, 8 Wilton Crescent, Knightsbridge, London, S.W.1, offers evening classes in a three-year course leading to the qualifying examination in optics. Students must be qualified pharmacists or hold similar professional qualifications. An announcement appears on another page.

Extension to Range. — The British Drug Houses, Ltd., Graham Street, City Road, London, N.1, have added to their range of sex hormones a new product, Mepilin, a combination of ethinyl œstradiol, 0.01 mgm., and methyltestosterone, B.D.H., 3 mgm. The product is issued in bottles of twenty-five, 100 and 500 tablets. Tax-free dispensing packs of 100 and 500 are available but are supplied only when specifically ordered as such.

Books for Students.—On other pages of this issue, Bailliere, Tindall & Cox, 7 Henrietta Street, London, W.C.2, give details of a number of books on pharmaceutics of which they are the publishers.—W. & G. Foyle, Ltd., 119 Charing Cross Road, London, W.C.2, direct attention elsewhere to the services offered at their bookshop.—On another page the Technical Press, Ltd., Gloucester Road, Kingston Hill, Surrey, give details of text and reference books they publish.

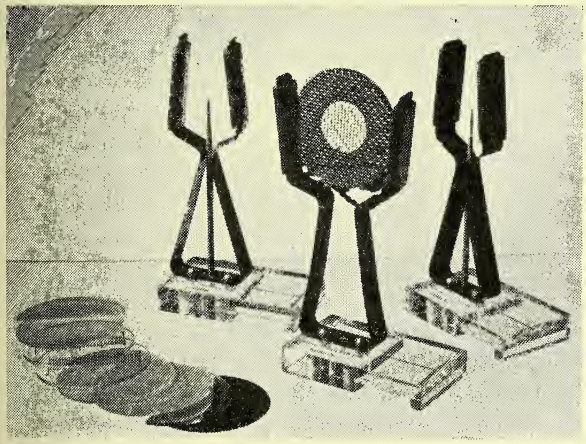
New Products and Packs. — Chas H. Phillips Chemical Co., Ltd., 179 Acton Vale, London, W.3, have introduced a new popular size of Milk of Magnesia tablets: a handy wallet pack containing twelve tablets, each sealed in foil.—Southon Laboratories, Ltd., 83 Upper Richmond Road, London, S.W.15, have introduced a miniature pack of their Esoban cream of calamine. Chemists are reminded that bonus parcels of existing sizes continue to be available. — Spa Brushes, Ltd., Chesham, Bucks, have designed a toothbrush aimed at cleaning the inside as well as the outside crevices of the teeth. The new brush, the Spa Spearhead, presents a "spear head" shaped from the first four rows of tufts with remaining rows in orthodox formation.

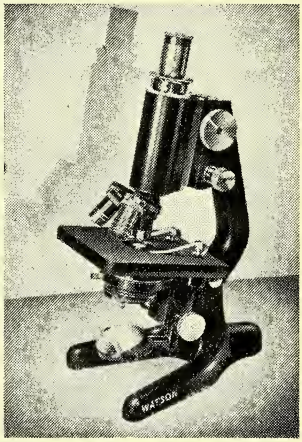


Training for Students in Pharmacy.—Educational institutes which give in this issue details of courses leading to the Intermediate examination of the Pharmaceutical Society include: Brighton Technical College; Bristol College of Technology; Dundee Technical College; Heriot-Watt College, Edinburgh; Royal Technical College, Glasgow; Huddersfield Technical College; Plymouth and Devonport Technical College; Stockport College for Further Education; and Sunderland Technical College.—The following institutes offer courses leading to the Pharmaceutical

Chemist Qualifying examination: Bradford Technical College; School of Pharmacy, Brighton Technical College; School of Pharmacy, Bristol College of Technology; Welsh College of Pharmacy, Cardiff College of Technology and Commerce; Dundee Technical College; Heriot-Watt College, Edinburgh; Royal Technical College, Glasgow; School of Pharmacy, University of London; Department of Pharmacy, University of Manchester; Plymouth and Devonport Technical College; Portsmouth Municipal College; Sunderland Technical College.

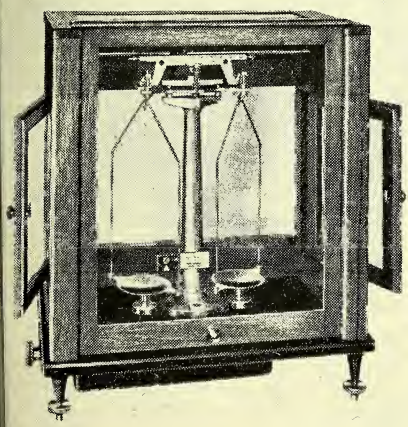
INSTRUMENTS FOR STUDENTS





Left: Microid Junior optical set incorporating matt transparent plastic and squared paper screens (Griffin & Tatlock, Ltd.).

Right: Student's microscope (Service II) by W. Watson & Sons, Ltd.



Analytical balance (Stanton Instruments, Ltd.).

APPROVED NAMES

THE British Pharmacopœia Commission has prepared a further list of approved names for drugs (see also *C. & D.*, 1950. II.526, and *C. & D.*, 1951.I.231). The new names are as follows:—

APPROVED NAME	OTHER NAMES
Aloxidone ...	3-Allyl-5-methyloxazolidine-2:4-dione. Malidone.
Cyanocobalamin ...	Vitamin B_{12}. Anacobin Cobione; Cytamen.
Di-iodohydroxyquinoline ...	8-Hydroxy-5:7-di-iodoquinoline. Diodoquin.
Domiphen bromide	Dodecyldimethyl-2-phenoxyethyl-ammonium bromide. Bradosol.
Ethyl biscoumacetate	Ethyl 4:4′-dihydroxydicoumarinyl-3:3′-acetate. Pelentan; Tromexan.
Ethyl methimazolate	2-Carbethoxythio-1-Methyliminazole.
Methimazole ...	2-Mercapto-1-methyliminazole. Mercazole.
Methorphinan ...	3-Hydroxy-N-methylmorphinan. Dromoran is the hydrobromide.
Sulphafurazole ...	5-*p*-Aminobenzenesulphonamido-3:4-dimethyl*iso*oxazole. Gantrisin.

PRICE CHANGES

W. B. Cartwright, Ltd. (from August 4).

	Doz.	Tax	I.R.P.
Moorland indigestion tablets			
4-roll pack ...	7 6		1 1
8-roll pack ...	14 6		2 0

Cuxson, Gerrard & Co., Ltd.

Penicillin ointment 1,000 units per gm.	½-oz. ...		7
	1-oz. ...		10
	2-oz. ...		1 6
	4-oz. ...		1 9
	8-oz. ...		2 9
	16-oz. ...		4 9
Penicillin lozenges 1,000 units per lozenge tube of	10 ...		7
	20 ...		9
	50 ...		1 4
	100 ...		1 10
	500 ...		6 0

Pharmaceutical Specialities (*May & Baker*), *Ltd.* (from July 16).

Ephedrine hydrochloride tablets gr. ¼	25 ...		1 0
	100 ...		2 9
	500 ...		9 0
	1,000 ...		17 3
gr. ½	25 ...		1 6
	100 ...		4 0
	500 ...		16 3
	1,000 ...		31 6
gr. 1	100 ...		6 9
	500 ...		30 6
	1,000 ...		60 0

Parke, Davis & Co., Ltd. (from July 20).

Aconite, iodine and Chloretone vial, 1 fl. dr. ...		3½	1 6½
bottles, 2 fl. oz.	1 0	5	6
Molevac jar ...	1 3	6	9
Panteric compound tablets (CCT No. 504) bottle of 25 ...	9	4	0
100 ...	2 5½	13	5½
1,000 (disp. pack)	Nil	98	0
Panteric compound tablets (CCT No. 503) bottle of 25 ...	Nil	3	3
100 ...	Nil	11	0
1,000 ...	Nil	98	0

Rodmill Chemical Co., Ltd. (from July 28)

Gee's linctus pastilles, B.P.C. 2-oz.	10 0	Nil	

Actina, Ltd.

Bauchet roll film, Hyperpan	120/620	2	9
	127	2	5
	116	3	8



Hyperchromatic	120/620	2	7
	127	2	2
	116	3	3

Cuxson, Gerrard & Co., Ltd.

Sanoid zinc and starch powder, drum			1 0

W. B. Cartwright, Ltd. (from August 4)

Moorland Indigestion tablets	7 6		1 1
	14 6		2 0

Robinson & Sons, Ltd.

Napcell squares	9 6	Nil	3 0
Cestra face masks ...	122 9	Nil	12 9½

PROPRIETARY ARTICLES TRADE ASSOCIATION

Additions and Alterations to Protected List (Part 2)

Scrubb & Co., Ltd.

Increased prices, August 1:—

Carpet cleaner	10-oz.	15 9	Nil	1	9
Dry cleaner	5-oz.	13 6	Nil	1	6
Furniture cream,	5-oz.	13 6	Nil	1	6

Silvikrin Laboratories, Ltd. (Additions).

Silvikrin liquid shampoo		9 0	33⅓	1	3
cream shampoo		9 0	33⅓	1	3
cream shampoo		14 3	33⅓	2	0
Prices in Channel Islands:—					
Silvikrin cream shampoo		9 0		1	0
		14 3		1	7½
Prices in Republic of Ireland:—					
Silvikrin liquid shampoo		11 3		1	3
powder shampoo		4 6			6
hair tonic lotion		20 3		2	3
		33 9		3	9
Silvifix hair cream ...		27 0		3	0

Solport Bros., Ltd.

Portia:—					
White cotton netted hammock	D57	42 6	33⅓	6	6
Baby weighing outfits	D60	77 0	33⅓	11	9
Super non-flam sports shade	D430	33 0	33⅓	5	0

Tokalon, Ltd.

Coffret (three-cream) ...		20 2	100	4	0
Beauty box, slide ...		26 4	100	5	3
Casket		20 2	100	4	0

STANDARDS EXHIBITION

An exhibition "British Standards—the Measure of Industrial Progress" was staged recently at the Science Museum, South Kensington, London, to mark the Golden Jubilee of the British Standards Institution. Standardisation of chemical glassware was illustrated by a display of standard glass flasks, heat exchangers, stillheads and fractionating columns as used in both laboratory and industrial plant, and by means of a model of a plant (Quickfitz & Quartz, Ltd.) for sulphuric acid production at the rate of 20-25 tons weekly. In a section devoted to glass bottles and closures examples of various manufacturers were shown. Visitors were asked to demonstrate for themselves that all the caps were interchangeable with all the bottles. An exhibit by Lever Bros. & Unilever, Ltd. (on behalf of the Association of British Chemical Manufacturers) demonstrated how oils and fats are tested to ensure conformity with British Standards. The extent to which modern scientific glass apparatus is covered by British Standards was shown by a display provided by the British Laboratory Ware Association and the British Lampblown Scientific Glassware Manufacturers' Association, while the Scientific Instruments Manufacturers' Association showed scientific instruments used in formulating and applying standards.

CONFERENCE OF PHARMACEUTICAL COMMITTEE REPRESENTATIVES

PROPOSALS by the Ministry of Health for a settlement of the terms of remuneration for N.H.S. pharmaceutical contractors in England and Wales, to date from May 1, 1950, were placed before a Conference of Pharmaceutical Committee Representatives in London on July 25. Mr. H. Steinman (chairman, Central N.H.S. (Chemist Contractors) Committee) in the chair. Representatives present numbered 282, from 136 Committees.

Duty Discharged

THE CHAIRMAN reminded the Conference that the previous similar Conference, held on June 15, 1950, had charged the Committee to prepare a case for recovering the oncost that had been taken away from pharmacists, and had authorised the committee to enlist whatever help it thought necessary in preparing that case. Those instructions had been faithfully carried out, and early in February 1951 the case had been presented to the Ministry. From that time until recently, only one communication had been received in return.

When the Scottish award became public, there were informal discussions and the committee was then invited to meet representatives of the Minister. The Ministry had made it clear that the only question was oncost, and a further working party inquiry was to be put into being as speedily as possible to explore the possibility of instituting a uniform national drug tariff.

The offer before the Conference was not the Ministry's original offer, which the committee had firmly refused. After much argument and counter-argument the stage had been reached of the offer now before the Conference. The committee had agreed to place that offer before the present Conference.

The offer, the chairman emphasised, must be accepted or rejected completely. If the Conference decided instead to allow the matter to go to arbitration, the offer now before them would be null and void. The contractors' representatives would have a case to build up, with the possibility that there would be no arbitration until late in 1951 or early in 1952. Having thus summarised the position, Mr. Steinman invited representatives to give their views.

MR. R. W. GILHAM, Leeds, moved:

"That this Conference of Pharmaceutical Committee representatives authorises the Central National Health Service (Chemist Contractors) Committee to accept the terms now offered by the Ministry, viz., 25 per cent. oncost and an addition of 1d. per prescription for all prescriptions dispensed from May 1, 1950, such acceptance to be without prejudice to any reconsideration of the terms after April 1, 1952. Finally the Conference reaffirms its objection to any deposit system on containers."

If they in England and Wales refused the offer, he said, they would have before them a very stiff fight with the Ministry. If they accepted, the position would be cleared up, and they would still be able in April 1952 to make a further request for reconsideration of the dispensing fee.

MR. J. P. MURPHY, Liverpool, said that Liverpool had decided that the terms ought to be accepted. The interim till April 1952, could be used intelligently by the Central Contractors' Committee and the N.P.U. Preparing their case in this way, they would have a greater chance of success than by going before an arbitration board.

MR. A. H. PRESTON, Leicestershire and Rutland, asked for details of the case prepared by the Central Committee. He also asked for information on the Scottish award.

Secretary Gives Information

THE SECRETARY (Mr. H. Noble) replied that the case put up through the Central Committee was for a 40 per cent. oncost. They had been challenged on the oncost and had replied on the oncost alone, though had they wished to do so they could have put up a case for the fees as well. With regard to the Scottish award, the adjustment, retrospective to July 1948, secured by Scotland meant that something must be done about prescriptions dispensed in the past. There had to be a correction factor, and the factor being paid from July 1948 to the end of 1950 was an additional 1¼d. per prescription; from January 1951 onwards until the new tariff was out pricing would be done on the basis of 33 per cent. of the current tariff. Every penny on the fee in England and Wales was equivalent to 5 per cent. oncost if the ingredient cost nationally was 20d.

MR. H. M. HIRST, Yorks, North Riding, said that he was instructed by his committee, much to his regret, to support the acceptance of the terms, but the time had

arrived, in his opinion, to make it the last time they accepted.

Mr. M. Jackson, Leeds, thought the terms reasonable in existing circumstances.

The Chairman at this point invited observations from those who were opposed to acceptance of the terms.

Mr. A. V. L. Dowdeswell, Portsmouth, proposed "that the motion be rejected and arbitration sought at the earliest date." He admitted that the temptation was to accept the offer, which would bring them a nice little lump sum, but the arrears were due to them anyway. Should they have to go cap in hand and plead for what was due to them? If the offer were accepted it would tend to prejudice any future negotiations (cries of "No"). He objected to the differentiation in fees between England and Wales and Scotland. The fee was a professional fee, and there was no difference that he knew of between qualifications north and south of the border.

Mr. F. A. Mattock, Leicester, said that, if contractors accepted the offer, when prescribing costs fell they would be worse off than now. What they wanted was a professional fee.

Mr. W. Robertson, Southend-on-Sea, moved that the offer should be rejected and that the negotiating committee should demand as a minimum that the dispensing fee be increased to 1s. 3d., the container allowance restored to 2½d., and the percentage oncost restored to 33⅓ per cent., the negotiations to be reopened immediately and, if the result was not satisfactory, contractors to assist the negotiating committee by withdrawing their services.

Mr. V. G. Stockwell, Kent and Canterbury, said that if the offer were accepted that day they would find that in six months' time their fees, including oncost, bottles, etc., would be cut again, and cut drastically, without any redress whatever.

The Chairman asked whether the meeting was prepared to accept the resolution at that stage. The meeting agreed.

The Secretary, replying to a question on when payment of arrears under the award would be forthcoming, said he did not think it would be done before September, and it would then be the balance due, including the extra penny, from May 1950, for which they had already had a final payment or for which final payment was about due. Over most of the country that would mean four months. Either in September or October they would get the additional payment of one penny per prescription subject to the adjustment in oncost assessed to be due, for which they had so far had only a payment on account. It would be October before they got that. In August they would get payment on account for July's prescriptions on the basis of 25 per cent. oncost rate. They would not get all the money under that offer until pricing reached the current month, but precisely the same would happen under arbitration.

Mr. R. H. Williams, Glamorgan, asked whether, if the offer were accepted, the Contractors' Committee would at once proceed to make out a case for improved terms based on higher costs of living, greater expenses all round, and any other justifiable grounds.

Mr. J. M. Dowty, Southampton, criticised the Committee for not having a personal interview with the Minister. One of the best ways of securing action would be to form an association of Pharmaceutical Committees. He moved that that should be done.

Mr. W. J. Appleby, Nottinghamshire, said that his Committee was emphatically against the formation of a society of Pharmaceutical Committees. Advantage would be lost if they had another body interfering in the negotiations.

The proposal was withdrawn.

A Leicestershire representative urged that the Committee should press for part payment in September and make sure that the remainder was paid in October. The Chairman gave an assurance on this point.

Pricing

At the chairman's suggestion, the Conference then heard statements on the pricing position by Messrs. G. H. M. Graham (chairman, staff side, Pharmaceutical Whitley Council), and by D. E. Sparshott (vice-chairman).

COMING EVENTS

Thursday, August 9

British Association for the Advancement of Science, Anatomy Lecture Room, Medical Buildings, University of Edinburgh, 10 a.m. Address by Sir Cyril Hinshelwood (Foreign Secretary, R.S.) on "Chemistry at the Mid-century."

National Display Convention, Central Hall, Westminster, October 15-18. Intending delegates, exhibitors and competitors should make early application to 16 West Central Street, London, W.C.1.

Bolton and District Pharmaceutical Association. Visit to Birdsgrove House, Mayfield nr. Ashbourne, Derbys, August 12. Leave Howell Croft, 9.30 a.m.

Internationalism Amongst Pharmacy Students

By Lester G. Cashen
(Overseas Representative, National Union of Pharmaceutical Students of Australia)

THE seeds of internationalism amongst pharmacy students derive from two main sources: The *Fédération Internationale Pharmaceutique* and the International Union of Students. Early in 1947 the B.P.S.A. Executive authorised Mr. Stephen Challen and Mr. John Shinner to examine the possibility of setting up an international pharmaceutical students' organisation. With that backing they attended the thirteenth general assembly of F.I.P. in Zurich in August 1947. There the proposal received warm support, and the B.P.S.A. convened a preparatory commission, which met in the Council room of the Pharmaceutical Society of Great Britain at Easter 1948. Twelve countries were represented, and support for the ideal of an international body, freed of suspicion of political infiltration, was expressed by another eight. The Commission adopted a framework constitution drafted by B.P.S.A., and authorised a preparatory committee of three members (Great Britain, Eire and Holland) to organise the inaugural conference. Mr. S. Challen was appointed *Co-ordinating Secretary* of the proposed international body. It is noteworthy that the offer of I.U.S., dominated by the government in Prague, that the existing international student body should be utilised to bring together pharmacy students was not acceptable to the preparatory commission. It is due to the pertinacity of B.P.S.A. that the organisation came into being in a comparatively short time without the active support of established student organisations.

The actual formation of the International Pharmaceutical Students Federation (I.P.S.F.) was the outcome of an inaugural conference sponsored by B.P.S.A. in London in August 1949, at which Australia, Austria, Denmark, Eire, Great Britain, Finland, Holland, Iceland, Norway, Sweden and Switzerland were represented. Letters expressing sympathy with the idea but regretting inability to send delegates were received from France, Belgium, Greece, Italy. Poland and the Oklahoma University, U.S.A. Because of Mr. Challen's absence in H.M. Forces, Mr. Sidney Relph became *Co-ordinating Secretary,* and in recognition and appreciation of the initiative taken by B.P.S.A., he was elected its first *President.* In that capacity he reported to the general assembly of F.I.P., at Amsterdam, later in the month of August 1949. There, the news of the formation of the students' organisation, and the report on its constitution and proposed activities, were warmly welcomed.

As the time of the first of the biennial conferences (Copenhagen, August 13-23) is now almost here, it is opportune to look at this organisation of two years' standing and examine its achievements. They are:

1. The creation of an international contacts list of some seventy-five names, covering thirty countries.

2. Visits by a party of British students to Holland and by Dutch students to England.

3. Five-nation representation at B.P.S.A. annual conference; Australian representation at the Finnish students' conference, 1951.

4. Encouragement of the formation of a student body in Eire.

5. Wide distribution of an I.P.S.F. bulletin, with news from member countries.

6. Considerable support for the forthcoming Copenhagen conference, where fifty students from a dozen countries will live together for seven days before embarking upon the formal sessions.

At present I.P.S.F. is a body constituted on five main points:

1. Its membership—which embraces as full members national organisations of pharmaceutical students and as associates persons and societies "who wish to promote the prosperity of the Federation."

2. Its biennial conferences—at which the general assembly elects officers and sanctions future activities.

3. The Executive of five, which is the actual administrative body.

4. Its activities, which pursue the stated object "to study and promote the interests of pharmaceutical students and to encourage international co-operation amongst students." Those activities include a permanent form of contact between national student organisations; the exchange of ideas and students between countries; the collation of information on pharmaceutical education; and encouragement of national student associations.

5. The Federation is non-political and "shall not trespass upon the provinces of national associations."

I.P.S.F. has functioned fairly well to date, owing to the store of energy issuing from the initiative of B.P.S.A. But the testing-time will come after Copenhagen. The international body is poorly constituted, and will present to a new executive a heavy organisational task. Reconstitution is essential to make the work of I.P.S.F. more effective and to allow the most efficient use of executive members' time. The outlines of a new constitution will be found in the following plan for the future of I.P.S.F.

I.P.S.F. should be a body collecting information about students' activities in various countries, collating student opinion and advising student organisations on current problems. The administrative officers of the international body would best be ex-students who have taken a leading part in student organisations in their own countries during their student days.

Such an arrangement would utilise the energy of persons who are keen to assist students but who recognise that their influence in any one national organisation must not continue too long, lest the natural development of future student leaders be retarded. The continuing freshness and *naiveté* of the student approach would continue to be appreciated by the senior pharmaceutical organisations, yet the advice of former student leaders would be available and indeed the value of this advice would be enhanced by the knowledge gained in I.P.S.F. circles. Today, students graduate from intra-national to national and finally to international bodies, and it is found that by the time their organisational ability is at an efficient pitch they cease to be students. Therefore, the international organisation will serve the twofold purpose of advancing the interests of students and pharmacy, as well as maintaining the vigour of ex-students who are as yet much too inexperienced to pass into senior pharmaceutical organisations. A small secretariat of president, vice-president and secretary-treasurer general should replace the unwieldy present executive of five, which includes a treasurer (who has a negligible income to manage) and a liaison secretary in Holland who provides the link between F.I.P. and I.P.S.F. The latter officer has found it more expedient to arrange direct correspondence between F.I.P. and the president or secretary of I.P.S.F. To facilitate the work of the secretariat, there would be need to be appointed in each member country an I.P.S.F. local secretary-treasurer, who would maintain contact between the national student organisation and the secretariat, and who would act as local agent of the secretariat in the organisation of activities and collection of information. An international body of pharmacy students must not compromise national student bodies by adopting controversial policies. The secretariat should be empowered to give expression to any feeling that finds unrestrained support in each member country. From a desire to build up the organisation into one with a powerful voice and purpose the danger arises that the executive, with its present authority, may commit students to the support of controversial policies.

Already two pharmaceutical companies in Great Britain make a point of employing foreign pharmacists, and there seems no reason why I.P.S.F., in conjunction with F.I.P., cannot work to have this admirable arrangement extended in Britain and in other countries. Local student associations could have the benefit of lectures from recently qualified pharmacists and could assist in finding accommodation and arranging entertainment. Let it be understood that the international student organisation would in a large measure assist the exchange of recently qualified pharmacists rather than students, whose studies must prevent any lengthy absence from their own country. The publication of a world student magazine may be expected as one of the fruits of evolution in the international organisation.

Finance is the biggest problem facing I.P.S.F. Understandably, national organisations must utilise their funds for the benefit of their own members—investment in an abstract, though praiseworthy, ideal does not win favour with students whose coppers are paid out to local secretaries in the promise of personal benefits. Perhaps those good friends of pharmacy, the large pharmaceutical manufacturers, themselves international, may be able to help.

The rapid growth and consolidation of I.P.S.F., and the desire for contact between national pharmaceutical student organisations, demonstrates clearly the spirit of internationalism that lies dormant in the hearts of students of pharmacy. Europe, the Middle East, Australasia, Africa and South America have all given evidence of interest in I.P.S.F. Great Britain has taken the lead, and all credit for success to date must be hers, but the future lies with the other countries. The I.P.S.F. is the pharmaceutical students' contribution to peace in years to come.

Too Many Colleges?

By John E. Shinner, Ph.C.

THE most recent report of the board of examiners for the Pharmaceutical Society's examinations in England and Wales reveals a state of affairs which some Sunday newspapers might brand as something of a public scandal. They would not be very far wrong. There is hardly a single subject in which the examiners do not make some derogatory remarks concerning the teaching and general preparation of the candidates. The following extracts may be quoted:—

ZOOLOGY: "A large number of candidates were so poor that they ought not to have been sitting the examination. There was evidence of teachers going into great detail in certain respects of the subject, but apparently ignoring fundamental principles."

PHARMACEUTICS: "Candidates showed most depressing evidence of a lack of preparation for the examination."

PHARMACEUTICAL CHEMISTRY: "In general, most of the candidates appear to have had insufficient training to cover the scope of the syllabus."

Society Blameless

This state of affairs is not the fault of the Pharmaceutical Society. Nevertheless, as the Society is largely responsible for pharmaceutical education in this country, under the ultimate direction of the Privy Council, it has, therefore, an interest in the conditions in colleges which it approves for courses leading to its examinations. When this perennial question of examination failures is raised at Bloomsbury Square the Council invariably goes into committee after the first few minutes of discussion, and nothing more is ever heard of its deliberations. I believe that secretiveness to be a profound mistake. Its only purpose can be to keep quiet the names of certain colleges, and that is a sure way of allowing shortcomings to go uncorrected. It would be an excellent stimulus if the percentage of passes of individual colleges was published every five years. To adopt that course might well lead to action being taken where it is most desirable as well as being a useful guide to a prospective student in his choice of college. If the Pharmaceutical Society is aware which colleges are responsible for the state of affairs described above in the examiners' remarks on the important subject of pharmaceutics, then it has no right to allow its own student-associates to be trained there. The Society, no doubt, is in possession of disquieting facts, but presumably can do nothing. The general facilities at a few colleges are much below standard but it would be irresponsible to suggest that those colleges should be struck off the list when colleges are full to overflowing.

Inspection

The Society's inspections of schools may be thorough but they should be more frequent, with particular attention to the staff-student ratio. I do not believe that students have less inherent capacity for passing examinations than they had, but I do know that the staff position in some colleges is unsatisfactory. One would have thought that frequent inspections by the Society, with a suitable report to the governing authority, might produce improvements which a given department of pharmacy might be unable to obtain for itself. To some extent, of course, the board of examiners should do something to put its own house in order. The board comprises our best teachers and it would not be out of their province if they gave more indications as to how the present position can be improved. I would suggest that they stop asking the sort of memory question that may well be largely responsible for their present comments. The examiners say "When asked to describe and explain the preparation of a galenical many failed to offer any explanation of the process." Why is it necessary to ask for the preparation of a particular galenical? It is all in the B.P. or the Codex. If examiners ask for the principles underlying the preparation of a group of galenicals students will find time to concentrate on this important aspect of learning and to apply themselves intelligently to the course instead of learning off by heart a whole mass of constituents and other futile details. The British Pharmaceutical Students' Association has made this point for years.

Many believe, with the author, that no great improvement will be forthcoming until there are fewer and better schools, if possible in association with the universities, where salaries and conditions for the staff are more attractive and where it is not necessary to ask one man to lecture in three or more subjects.

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VOL. CLVI AUGUST 4, 1951 No. 3728

Acceptance—and What Follows

THE representatives of Pharmaceutical Committees in conference in London have given their decision (briefly recorded in last week's issue, p. 100, and more fully reported on p. 139 of this issue) in favour of acceptance of the Ministry's "compromise" offer. A few voices were raised in opposition, and if there were others who would have liked an opportunity of adding their protest, the fact that they were denied the chance to do so must be laid at the door of the representatives and not of the chairman, whose conduct of the meeting was entirely in accordance with standing orders. The fact is that an overwhelming majority of contractors present knew thoroughly well what they wanted, and were entirely willing to forgo further discussion on the subject.

The position now is that England and Wales have settled for terms different in important respects from those in Scotland and Northern Ireland. The full implications of those differences should be understood in all areas, so that they may be used to increase solidarity in the profession in the future and not seized upon for insertion of a wedge to drive them further apart.

In the first place it cannot be too often reiterated that conditions in England and Wales on the one hand and Scotland and Northern Ireland on the other are in themselves very different. In England and Wales contractors gained as a result of the National Health Service a greater volume of new dispensing than did their Scottish colleagues, since dispensing doctors were rare in Scotland even before 1945. Secondly the multiples are relatively much stronger South of the Border, and support for strong action might therefore be less certain in England and Wales. Thirdly the Scots had come to no terms previously about entering the pharmaceutical service, whereas contractors represented by the Central N.H.S. (Chemist Contractors) Committee had agreed with the Ministry on dispensing fees, oncost and container allowance.

So it may be reasonably argued that the contractors in England and Wales were not less firmly opposed to the one-sided cuts in their oncost and container allowance, but were less strategically placed to take a strong line on dispensing fees, the battleground on which the Scots fought and won their notable victory. Mr. Noble revealed on July 25 that the Central N.H.S. Committee had been challenged principally on oncost, and to that subject it directed its efforts, with the expert help of professional accountants who had been called in to assist. With the facts that were accumulated it put in a claim for oncost at the rate of 40 per cent. The compromise at 25 per cent. (the penny on the dispensing fee may be regarded as equivalent to an extra 5 per cent., making 30 per cent.) represents, therefore, something like a halfway house between the 16 per cent. imposed arbitrarily by the Ministry and the 40 per cent. claimed by the negotiators: in fact, a true "compromise." Financially, in view of the difficulties in which many contractors were finding themselves as a result of delayed payments, increased capital investment, and payments-on-account calculated on an obsolete and inadequate basis, acceptance means a considerable benefit to contractors, and a benefit that is very nearly immediate, since it was hinted that a substantial payment of the oncost difference will be forthcoming in September. For those substantial advantages the representatives renounced the possibility of securing, by resort to arbitration, something much nearer the Scottish award in the matter of dispensing fees. They were, no doubt, helped in their decision by

a suggestion thrown out from the platform that the "ideal" conditions under which the Scottish award was made could not be hoped for in England, but it is probable that a similar idea was already present in the minds of most of the representatives. It is by no means certain that arbitrators in London would start with such unprejudiced minds, that such an overwhelming array of evidence could be so confidently and convincingly put forward, or that the Ministry's case would be so comparatively easily shaken as it was in Scotland.

But to adopt the path of prudence now is not to accept the present position as final. English and Welsh contractors are not satisfied with the present fees and are likely to be less so in the future. They recognise, as the Ministry recognises, that there is proper sanction for a difference between the Scottish dispensing fee and the English, but they recall that the differential was duly explored and assessed on the basis of ascertained figures. Nothing has happened to widen the differential, though the arbitrators have increased the Scottish fee. It follows that the English fee must be increased to maintain the differential.

Some may ask why the fee is really so crucial. Is it not sufficiently good policy to secure that the total payment is adequate, irrespective of how the amount is made up? By no means. A prescribing economy drive might easily make the 25 per cent. oncost rate a much less material factor in remuneration than it is today. A proper dispensing fee would ensure a basis of adequate reward throughout all changes of prescribing practice. It would, too, establish English contractors as professional men like their Scottish colleagues, and remove the danger that one group could be "played off" against the other to reduce the status of both. There were evidently many at the conference—and not all were among the speakers who opposed acceptance of the offer—who appreciated both the need for adopting that policy and the long and intensive preparation necessary to carry it out. That is the line of action for people who look to a secure future, and are not content with an immediate and perhaps temporary advantage.

Control of Dividends

THE proposal outlined by Mr. Hugh Gaitskell (Chancellor of the Exchequer) (p. 130) to limit dividends distributed by companies for a period of three accounting years has met with widespread opposition. The Chancellor's statement that "the psychological consequences of sharp increases in dividends are far greater than their direct monetary effect" is not in the nature of a rational argument that can be answered in kind. Rising dividends, he said, "act as an irritant" to those people who are not equity shareholders. By implication, that means that rises in dividends have materially affected the rise in the cost of living, and that the imposition of dividend limitation would help to discourage claims for higher wages and salaries. The first part of that assumption can easily be disproved. Increases in dividends have absorbed only a small fraction of the rise in profits, of which the greatest part has been taken by taxation or set aside to company reserves. Time will show whether the trade unions will "moderate" their claims for higher wages as a result of the control of dividends. As for higher trading profits, it can be demonstrated that they are a result of inflation.

The mechanism of the proposed dividend limitation can also be criticised. Those companies that have practised dividend restraint during the past two years will be at a disadvantage compared with companies that have raised dividends. Other injustices of a similar character are inherent in the proposals, yet any attempt to remedy them would involve so many administrative difficulties as to make the scheme unworkable.

FIFTY YEARS AGO

The Teaching of Botany

From the C. & D., August 3, 1901

ONE marked change has taken place during the past century so far as the professorial teaching of botany is concerned, for in the early years of the century all the important botanical chairs in Britain were held by systematists; now not a single one is occupied. This is not an unalloyed advantage . . . laboratory botany is being strangled by the exuberance of its terminology.

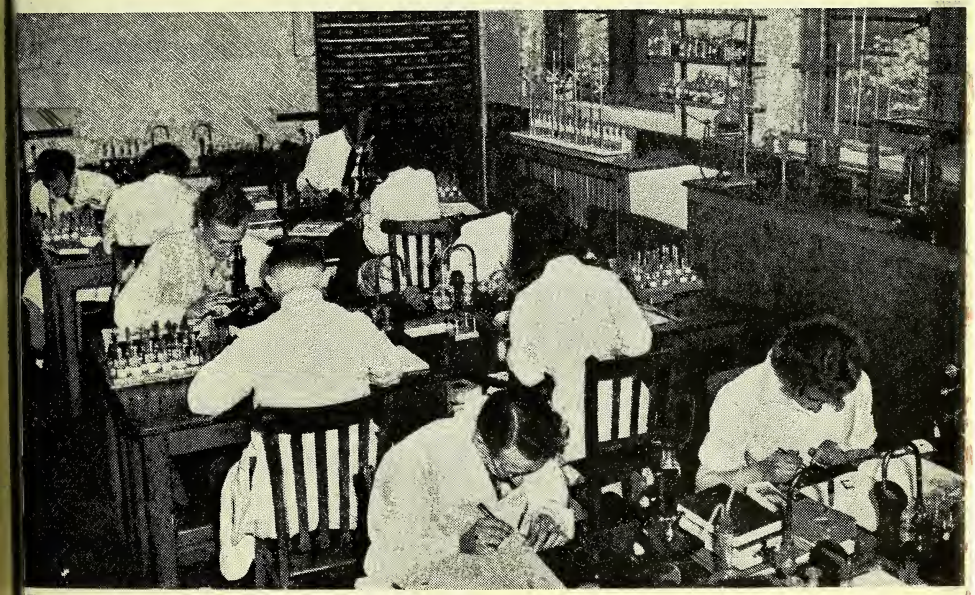
LIFE AS A PHARMACY STUDENT AT BRIGHTON

MANY entrants "discover" Brighton Technical College when they travel South from London to sit for the Pharmaceutical Chemist examination. They may well gaze a little enviously at those others—half a hundred every session—whose full-time training is taken in this well-ordered, well-equipped training-centre in the Queen of watering-places. Under the energetic direction of Mr. H. B. Mackie, B. Pharm., Ph.C., the College's Pharmacy Department has gone ahead from small beginnings to become in thirty years one of the most highly regarded and successful pharmacy schools in the country, with an ever-lengthening roll of sons and daughters holding leading positions in pharmaceutical industry, in hospital pharmacy, in retail business, in medicine, "pure" science, the teaching profession, pharmaceutical journalism, the Services. Of the lecturing staff of nine, seven have higher pharmaceutical qualifications, one is an M.Sc. and one a medical practitioner.



DISPENSING

The last students in the Chemist and Druggist course work through an examination paper.



PRACTICAL PHARMACOGNOSY

Fourteen students (a standard class) learn to make diagnostic tests, identify adulterants, examine structures.



PHARMACEUTICAL CHEMISTRY

The laboratory is large, and two classes work in it at a time. A research laboratory adjoins.

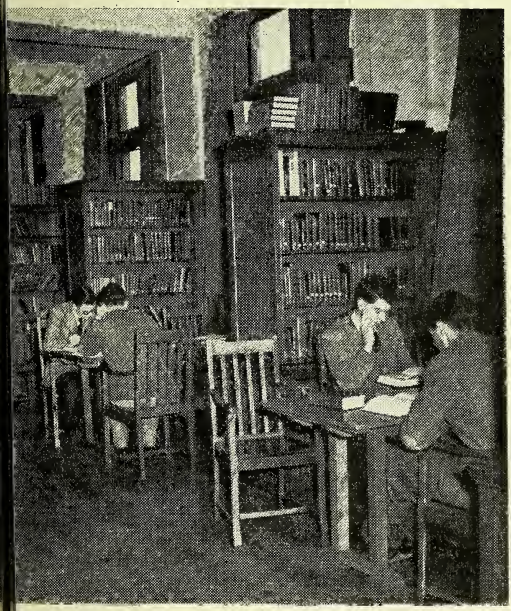


GALENICAL PHARMACY

On small-scale but authentic apparatus granulation is carried out "secundum artem".

PHARMACOLOGY

More can be learned by using a kymograph in practical laboratory work than by reading a book.



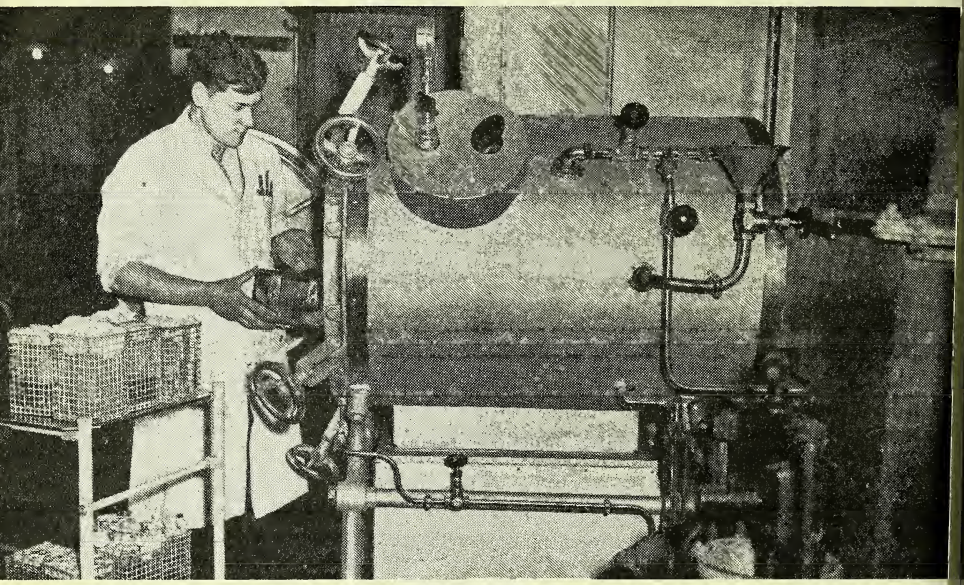
CHECKING REFERENCES

Students share the library with their opposite numbers from other faculties in the College.



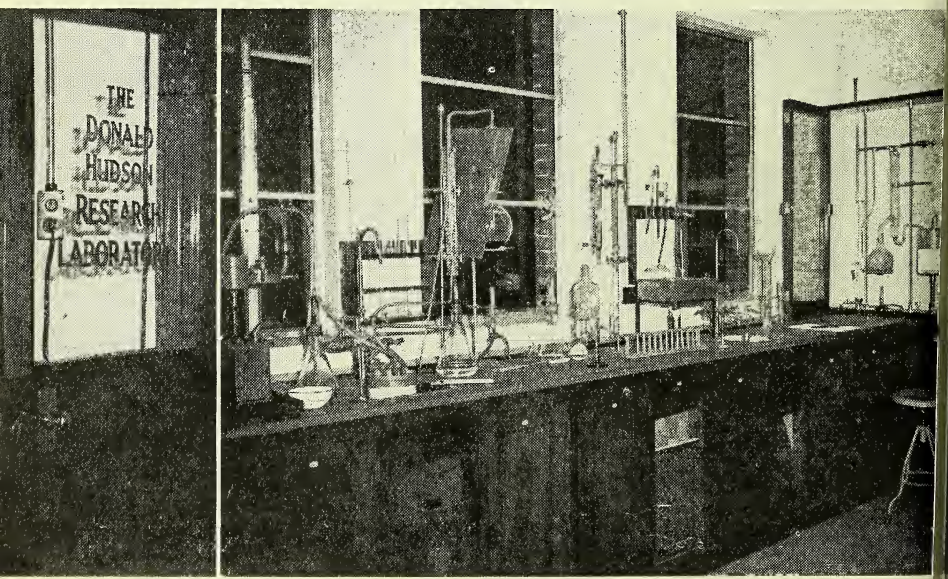
ESPRIT DE CORPS

The College mascot Drogulus is strongly held against all comers.



STERILISATION

Large scale electrically and gas-heated autoclaves are common property, but each student uses individua sterilising units in the course of his practical work in the dispensary.



PHARMACEUTICAL RESEARCH

Reserved to the higher staff, the Donald Hudson research laboratory enables them to try out n developments in the pharmaceutical field.

EDUCATIONAL INFORMATION

Training and Qualifications in Pharmacy

MEDICINE · DENTISTRY · SCIENCE · OPTICS · VETERINARY SURGERY · CHIROPODY

Steps In Becoming a Pharmacist

HE first step to be taken by a new en-ant to pharmacy is to register as a stu-ent with the Pharmaceutical Society. The gistration fee is £4 4s. and the candidate ust provide proof of having reached an pproved standard in general education. he next examination to be passed is the ociety's Intermediate examination in emistry, physics and biology. In pre-aration for this examination, one aca-mic year must be spent at an institution pproved by the Council of the Society. he tuitional part of the training is com-eted by two academic years at an ap-oved institution in preparation for the ualifying examination, the subjects of hich are pharmaceutical chemistry, phar-aceutics, pharmacognosy, physiology and armacology, and forensic pharmacy. The dent must also undergo a period of prac-al training, under articles, in a retail armacy, hospital or manufacturing phar-aceutical laboratory approved by the uncil. This apprenticeship may be taken before or after the Qualifying examination. If taken before the examination it is of two years' duration and, if taken after, of one. After having passed the Qualifying examination and served his apprenticeship the student is entitled to registration as a pharmaceutical chemist provided he is at least twenty-one years of age.

A student who has passed, at not more than two sittings, the General Certificate of Education examination in chemistry, physics and biology at advanced standard, or the final or intermediate B.A., B.Sc. or equivalent of any British university (the subjects to include chemistry, physics and biology) may claim exemption from the Intermediate examination. If passed before December 31, 1952, either examination could cover botany or zoology in place of biology. A student who has graduated in pharmacy in certain universities may claim exemption from all subjects of the Qualifying examination except forensic pharmacy.

Syllabuses for Qualifying Examination

IE syllabuses for the Pharmaceutical emist Qualifying examination under the ised system of education adopted by Council of the Pharmaceutical Society re made available in November 1950. e details are given concisely below. r those candidates registered as pprentice or Student" on and after he 1, 1948, the same syllabus will apply. the remaining Chemist and Druggist ualifying examinations for entrants who ve had only a one-year course, the ex-iners are being asked to limit their ques-ns to matters common to the present labus for the Chemist and Druggist alifying examination and new syllabus.

Pharmaceutical Chemistry

The examination in this subject com-es two written sessions, each of three rs' duration, and one practical session of six hours' duration. The examiners are not precluded from asking candidates oral questions during the practical sessions.

The candidate will be required to have a knowledge of the following:—The principles of physical chemistry treated in an elementary manner mainly with reference to their pharmaceutical application.

The general principles of inorganic chemistry based upon the characteristics of the elements and compounds shown by the periodic relationships and an elementary treatment of valency and the electronic structure of their atoms. An elementary treatment of atomic structure, isotopes, nuclear chemistry, natural and induced radioactivity. A general knowledge of organic chemistry, with particular reference to substances in frequent use in pharmacy. A knowledge of the structure, nomenclature and chemical properties of pharmaceutical

importance of the following and such of their derivatives as are in the British Pharmacopœia:—Diphenyl ethane, triphenyl methane, naphthalene, anthracene, furan, pyrole, thiazole, pyrazole, imidazole pyridine, quinoline, isoquinoline, acridine. The structure of phenanthrene. Chemical synthesis by means of the more important reagents.

A knowledge of chemistry of the following groups of medicinal organic compounds: sulphonamides, barbiturates, arsenical compounds, local anæsthetics. The general constitution and properties of the fixed oils, fats and waxes of the British Pharmacopœia. The principles involved in the estimation of the oxygenated constituents of essential oils. A knowledge of the structure and simple chemical properties of terpineol, limonene, carvone, menthol and camphor. The general methods employed for the extraction of alkaloids and the methods employed for the elucidation of their structure. The preparation and structure of uric acid, caffeine, theobromine and theophylline. A knowledge of the properties of pharmaceutical importance of vitamins and hormones of the British Pharmacopœia. The general chemistry of the carbohydrates, with a knowledge of the structure, excluding stereochemical considerations, of glucose and methylglucosides, fructose, sucrose, lactose, salicin. An elementary knowledge of the classification and general characteristics of the proteins and of essential amino acids and their relationship to proteins. The principles of analysis as exemplified by the determinations and processes indicated in the practical syllabus.

Practical

Volumetric analysis. Gravimetric analysis. The quantitative determination of an alkaloid in acid or alcoholic solution. The determination of the acid, saponification and iodine values of fixed oils and fats. The determination of aldehydes in volatile oils. The general methods for the detection and determination of chloride, sulphate, iron, arsenic and lead as impurities. The determination of the melting point of solids readily reducible to a powder and of the boiling point, density, refractive index and optical rotation of liquids. The identification of the functional groups and the preparation of simple crystalline derivatives of organic compounds. The identification or reference to class of organic chemicals of the British Pharmacopœia. The qualitative analysis of mixtures of inorganic substances and organic acids and their salts commonly used in medicine. The preparation of simple organic compounds illustrative of the general processes involved in preparing substances included in the theoretical syllabus.

The candidate will be required to bring to the practical examination his original laboratory notebooks, duly signed by the teacher, for inspection should the Examiners so desire. These notebooks must be taken away by the candidate at the close of the examination. In the practical examination the candidate may use any books or books he chooses to bring including his own laboratory notebooks.

Pharmaceutics

The examination in this subject comprises two written sessions and two practical sessions, each of three hours' duration. The examiners are not precluded from asking candidates oral questions during the practical session.

The historical development of pharmacy. The application of physical phenomena to pharmaceutical operations — change of state, systems of two or more components—solutions, dispersions. Pharmaceutical processes and products — preparation of material, solvents, extraction, assay and standardisation, clarification and filtration, including removal of fat, proteins, gums, pectins, tannins, ultrafiltration, stabilisation — maintenance of stability during storage, enzymes. The products of the British Pharmacopœia and the British Pharmaceutical Codex to be used to illustrate the above. The nature and properties of materials used in the construction of pharmaceutical apparatus. Microbiology in so far as it affects the content of this syllabus. Sterilisation and the preparation of sterile medicaments and materials. Disinfectants and antiseptics—methods of evaluation of disinfectants. Bacteriostatics and fungistatics. Asepsis in the preparation of sterile products—sources of contamination, aseptic precautions. The preparation, properties and storage conditions of immunological and diagnostic agents of the British Pharmacopœia; general principles underlying their standardisation. Dispensing practice — ethical codes; the prescription—purpose, proper rights; the doses of medicaments of the British Pharmacopœia; dispensing and compounding of medicines; containe

dical gases—containers and apparatus uired and its use; equipment and or- isation of the pharmacy. The candi- e will be required to have such a know- ge of French or German as will enable , with the aid of technical dictionaries, translate into English passages from rmacopœias in that language.

PRACTICAL

The student must be prepared to carry ordinary pharmaceutical operations, in- ding the making of preparations in- ded in the British Pharmacopœia and British Pharmaceutical Codex, the dis- sing of prescriptions, the preparation dispensing of sterile medicaments and erials, the detection of unusual doses the completion of preparations in a per manner. The preparation of sterile dicaments and materials includes the paration of culture media, methods of luating antibiotics, sensitivity tests and s for sterility.

The candidate will be required to bring to the tical examination his original laboratory note- s, duly signed by the teacher, for inspection d the Examiners so desire. These notebooks be taken away by the candidate at the close he examination. In the practical examination candidate will have the opportunity of consult- he British Pharmacopœia and the British Phar- utical Codex.

Pharmacognosy

he examination in this subject com- s one written session of three hours' ation and one practical session of three rs. The examiners are not precluded asking candidates oral questions dur- the practical session.

he candidate will be required to have nowledge of the following:—1. The merce in and history of crude drugs. ystems of classification of crude drugs. ultivation, collection, preparation for market and storage of crude drugs. 4. nges occurring in the drying, storage comminution of crude drugs. The rs and organisms influencing deteriora- of crude drugs. 5. Methods used for examination of crude drugs. The iso- n and identification of tissues and cells. rochemical tests for cell walls and cell ents. Microscopical measurements. systematic description of crude drugs. he macroscopical and sensory charac- biological and geographical sources, nercial varieties and adulterants and constituents of the crude drugs in frequent use in pharmacy. 7. The microscopy of drugs of organised structure in the whole, broken or powdered condition, as illustrated by cascara, clove, cardamom fruit, fennel, belladonna herb, ginger, liquorice, ipecacuanha. 8. The microscopy of the starches and starch products of pharmaceutical importance. The use of microscopical characters to identify drugs of unorganised structure in frequent use in pharmacy. 9. Groups of drug constituents and their significance in pharmacy. Qualitative tests for the identification of, or the detection of adulteration in, the crude drugs in frequent use in pharmacy. 10. The types and significance of standards for crude drugs included in the British Pharmacopœia and the British Pharmaceutical Codex. The evaluation of crude drugs. 11. Unmedicated surgical dressings, their manufacture, structure and standards. The sources, preparation, characters, qualitative chemical tests and constituents of fibres used in the manufacture of surgical dressings. 12. The principles underlying the practical work of the syllabus.

PRACTICAL

The candidate must be prepared: 1. To examine and describe the macroscopical characters, the general distribution of tissues, the nature of the cell walls and the cell contents of crude drugs, and to refer them to their morphological groups. 2. To identify in the entire or broken condition, by their gross characters and by qualitative tests, the crude drugs in frequent use in pharmacy and to state their biological and geographical sources. 3. To detect adulteration and deterioration in crude drugs in frequent use in pharmacy. 4. To analyse mixtures of crude drugs in the entire or broken conditions. 5. To examine microscopically, identify and describe the drugs included in paragraphs 7 and 8 of the theoretical syllabus. 6. To identify powders of single crude drugs and to report upon their purity. (The candidate will be allowed to use any book or books he wishes to bring.) 7. To make microscopical measurements. 8. To examine, identify and report on the fibres and dressings named in paragraph 11 of the theoretical syllabus. 9. To carry out simple exercises in drug evaluation. 10. To recognise, in the entire condition, those crude drugs used in pharmacy or as sources of isolated active principles.

The candidate will be required to bring to the practical examination his original laboratory notebooks, duly signed by the teacher, for inspection should the Examiners so desire. These notebooks must be taken away by the candidate at the close of the examination. In the practical examination the candidate may use any book or books he chooses to bring (including his own practical notebooks) except for the answering of those questions involving objective descriptions of the macroscopical characters of crude drugs or the microscopical characters of those drugs indicated in paragraph 5 of the practical syllabus.

Physiology and Pharmacology

The examination comprises one written session of three hours' duration and one practical session of three hours' duration. The examiners are not precluded from asking candidates oral questions during the practical session.

The candidate will be expected to possess an elementary knowledge of the basic facts in the branches of physiology and pharmacology listed below, and of the main methods by which these facts were established.

Physiology

(*General*): The properties and control of skeletal, visceral and cardiac muscle. The formation, properties, functions and circulation of the blood and lymph. The mechanism and control of pulmonary ventilation; gaseous interchange at the lungs and tissues. Artificial respiration. The alimentary tract. Basal metabolism and body heat. The principles involved in constructing a balanced diet; vitamins. The kidneys and urinary tract. The central and peripheral nervous systems, including the autonomic nerves. The special senses of sight, taste and smell. The structure and functions of the glands of internal secretion, including (*a*) pituitary body, (*b*) thyroid and parathyroids, (*c*) pancreas, (*d*) suprarenals, (*e*) testes and ovaries. The elements of reproduction in man. (*Histology*): The candidate must possess an elementary knowledge of the microscopical structure of the following:—Muscle and nerve; the heart, blood vessels and blood; lungs; the digestive glands; stomach and intestines; liver; kidneys; skin; the endocrine glands and the reproductive organs, including the mammary gland and the placenta. (*Biochemistry*): The biochemistry and metabolism of carbohydrates, fats and proteins. The composition a functions of the salivary, gastric, biliar pancreatic and intestinal secretions. Tl composition and nutritional value of cor mon foodstuffs. The chemistry of musc lar contraction. The composition of bloo lymph and cerebrospinal fluid. Norm and abnormal constituents of urine.

Pharmacology

Scope of pharmacology. Theories of a factors affecting drug action. Quantit tive methods in pharmacology. Dose-r sponse curves. The general principles a methods underlying the biological assa of the British Pharmacopœia, excluding t assays of sera, vaccines and bacterial d rivatives. Special attention should be giv to the determination of toxicity and LD_5 An elementary study of the statistical pri ciples involved in the assessment of t error of these quantitative tests. Dru affecting structures innervated by the aut nomic nervous system and by the soma motor nerves. Drugs used as central ne vous depressants and stimulants. Antip retics. Local anæsthetics. Emetics; a acids; purgatives; astringents; diureti Disinfectants, bactericides and bacteriost tics, including antibiotics. The applicati of pharmacological principles in treatme of poisoning.

Practical

The candidate must be prepared:— show his acquaintance with the metho employed for the demonstration of func mental physiological and pharmacologic processes, as laid down in the foregoi syllabus, and to carry out such chemi manipulations or simple experiments as a comprised therein. To recognise and d scribe with diagrams, histological prepa tions of any tissue or organs mentioned the foregoing syllabus.

Laboratory Notebooks

The candidate will be required to bring to practical examination his original laboratory no books, duly signed by the teacher, for inspect should the Examiners so desire. These noteboo must be taken away by the candidate at the cl of the examination. In the practical examinati the candidate will be allowed to use his origi laboratory notebooks, other than his histology no book, provided that the books contain no otl matter.

The use of loose-leaf laboratory no books, in any subject, during the sessi 1951-52 and subsequently will not acceptable to the examiners.

EDUCATIONAL INFORMATION

Forensic Pharmacy

The examination in this subject comprises one written session of three hours' duration.

The candidate will be required to have a knowledge of the following enactments and the subordinate legislation made under them, in so far as they are applicable to the practice of pharmacy in Great Britain: the Pharmacy and Poisons Acts, 1852 to 1941, the Dangerous Drugs Acts, 1920 to 1932, the Acts relating to the National Health Service, the Shops Acts, the Protection of Animals Act, the Food and Drugs Act, the Venereal Disease Act, the Cancer Act, the Therapeutic Substances Act, the Penicillin Act, the Radio-Active Substances Act, and the Acts relating to the sale of spirits (including methylated spirits) and medicated wines, and the sale of abortifacients.

The Society's Council agreed:—

1. That the syllabuses for the two-year course for the Qualifying examinations be adopted forthwith for teaching purposes, and examined upon for the first time in June 1952.
2. That for the June and December 1951, Qualifying examinations based on a two-year course the examiners be asked to limit their questions to matters common to the present two-year syllabuses and new syllabuses.
3. That the periods of the Qualifying examinations, based on a two-year course to be held in June 1951, and subsequently, take the shortened form indicated at the head of the new syllabuses.

Courses for Pharmacy Students

I. Intermediate Examination

The following technical colleges offer courses for the Intermediate examination of the Pharmaceutical Society. Students are advised to apply for enrolment as soon as possible. The date of commencement of term is given and the date of enrolment, where known, is shown in parentheses.

Aberdeen: Robert Gordon's Technical College.—Head of school of pharmacy: J. E. Bowen, B.Sc., Ph.C., F.R.I.C. October 2.

Birmingham: Central Technical College.—Head of department of pharmacy and biology: F. R. C. Bateson, B.Pharm., Ph.C. September 24.

Blackburn: Municipal Technical College.—Principal: E. Tyler, D.Sc. September 10.

Bolton: Municipal Technical College.—September 24 (enrolment during week commencing September 10).

Bournemouth: Municipal College.—(Enrolment during period September 10 to 13). Details from Registrar.

Bradford: Technical College.—Head of department: F. N. Appleyard, B.Sc. (London), Ph.C., F.R.I.C. October 1 (enrolment September 25 to 28).

Brighton: Technical College.—Head of school: H. B. Mackie, B.Pharm. (Lond.), Ph.C. September 18.

Bristol: College of Technology.—September 20. Details of courses from head of pharmacy department: W. Cooper, Ph.C.

Burnley: Municipal College.—September 17 (enrolment during period September 10 to 13). Principal: A. E. Wales, M.Sc., Ph.D., F.R.I.C.; Head of science department: F. Dearnley, M.Sc., A.R.I.C.

Cardiff: College of Technology.—Head of Welsh College of Pharmacy: R. V. Lloyd, B.Pharm. (London), Ph.C. October 1.

Carlisle: Technical College.—September 17. Principal: F. Gardner, B.Sc. (Vict.).

Chelmsford: Mid-Essex Technical College.—September 10. Principal: W. Taylor, D.Sc., F.R.I.C.

Cheltenham: North Gloucestershire Technical College.—September 17.

Colwyn Bay: Technical College.—September 4 (enrolment September 3).

Coventry: Technical College.—September 24 (enrolment during week commencing September 17).

Croydon: Polytechnic.—September 24 (enrolment during week commencing September 17). Head of science department: W. J. Boyd, B.Sc., Ph.D., A.R.I.C. (vice-principal). Details from the secretary.

Crumlin: Technical College of Monmouthshire.—September 13. Head of department of science: G. Gratton, M.Sc., A.R.I.C.

Dagenham: South-east Essex Technical College.—September 18 (enrolment September 17). Principal: F. Heathcoat, M.Sc., Ph.D., F.R.I.C.

Derby: Technical College.—September 17 (enrolment September 10, 11 and 12). Principal: W. A. Richardson, D.Sc.

Doncaster: Technical College.—September 24 (enrolment during week commencing September 17).

Dundee: Technical College.—Head of pharmacy department: H. A. Perkin, Ph.C., B.Pharm. September 17.

Edinburgh: Heriot-Watt College.—Head of department: H. H. Campbell, A.H.-W.C., B.Sc., Ph.C., F.R.I.C. October 9 (enrolment October 8).

Folkestone: Technical College.—September 6 (enrolment up to September 3).

Gillingham: Medway Technical College.—September 11.

Gloucester: Technical College.—September 24 (enrolment during week commencing September 10).

Guildford: County Technical College.—September 24. Principal: J. R. I. Hepburn, D.Sc., F.R.I.C.

Halifax: Municipal Technical College.—September 13 (enrolment September 5, 6 and 7).

Huddersfield: Technical College.—September 17 (enrolment as soon as possible).

Hull: Municipal Technical College.—September 4.

Kingston-on-Thames: Technical College.—September 17 (enrolment September 13 and 14).

Leeds: College of Technology.—September 12.

Leicester: College of Technology.—Head of school of pharmacy: C. Gunn, B.Pharm. (London), Ph.C.

Liverpool: College of Technology.—Head of pharmacy department: T. L. Bowyer, F.R.I.C., Ph.C. September 10. Particulars of courses from head of department.

London: Acton Technical College.—September 17. Chelsea Polytechnic.—September 24. Northern Polytechnic, Holloway, London, N.7.—September 24. Principal: T. J. Drakeley, D.Sc., Ph.D. (Lond.), F.R.I.C. Norwood Technical College. Knight's Hill, West Norwood, London, S.E.27. (Head of the chemistry and biology department: J. T. Stock, Ph.D.).—September 3. Walthamstow, South-west Essex Technical College, Forest Road, Walthamstow, London E.17.—September 12 Head of science department: R. W. Jukes, B.Sc., A.R.I.C. West Ham Municipal College, Romford Road, West Ham, London, E.15.—September 24. Woolwich Polytechnic.—October 1.

Middlesbrough: Constantine Technical College.—September 17.

Neath: Technical College.—September 17 (enrolment week commencing September 10).

Newcastle-on-Tyne: Rutherford College of Technology.—September 24 (enrolment, week commencing September 1

Newport (Mon): Technical Colleg —September 10.

Northampton: College of Techn logy.—September 17 (enrolment Septe ber 10).

Norwich: City College.—Septemb 17 (enrolment September 7, 10 and 11).

Nottingham: Nottingham and D trict Technical College.—Sept. 24.

Plymouth and Devonport: Technic College.—Head of pharmacy depa ment: V. Smith, M.Sc., F.R.I.C., Ph. September 17. Prospectus from princip

Portsmouth: Municipal College.—September 18 (enrolment September 1 13 and 14). Head of department: Thorpe, B.Sc., B.Pharm., Ph.C.

Preston: Harris Institute.—Septe ber 11.

Rotherham: College of Technolog —September 10.

St. Helens: Municipal Technical Co lege.—September 10 (enrolment Septe ber 4 to 7). Principal: J. R. Petrie, B.S

Salford: Royal Technical College.—September 18 (enrolment September 1

Shrewsbury: Technical College.—September 12.

Soham, Cambs: Grammar School.—September 11.

Southport: Technical College.—Se tember 3.

Stockport: College.—September (enrolment up to September 18). Vi principal and head of science departme S. G. Lawrence, B.Sc., A.R.I.C.

Stoke-on-Trent: North Staffordshi Technical College.—September 24.

Sunderland: Technical College.—Head of pharmacy department: F. Oliver, B.Pharm., B.Sc. (London). Oct ber 1.

Swansea: Technical College.—Se tember 17.

Torquay: South Devon Technic College.—September 24.

Wigan: Wigan and District Mini and Technical College.—September (enrolment September 20 and 21).

Wolverhampton: Wolverhampton a Staffordshire Technical College.—September 17 (enrolment September 10 13).

Wrexham: Technical College.—Pri cipal: D. C. Morgan, B.Sc., F.R.I.C.

II. Qualifying Examinations

The following educational establishmen offer courses for the Pharmaceutic

hemist and, except where stated, the hemist and Druggist examinations. Un- s already stated under the Intermediate amination section, the date of commence- ent of term is shown. (There is also a urse for students wishing to take the ternal examination.)

Aberdeen: Robert Gordon's Techni- l College.

Birmingham: Central Technical Col- ge.

Bradford: Technical College.

Brighton: Technical College.—Note: Chemist and Druggist course.

Bristol: College of Technology.

Cardiff: College of Technology.

Dundee: Technical College.—Sep- mber 24.

Edinburgh: Heriot-Watt College.

Glasgow: The Royal Technical Col- ge.—Professor of pharmacy: J. P. Todd, .D., Ph.C., F.R.I.C. October 1. No emist and Druggist course.

Leicester: College of Technology.

Liverpool: College of Technology.

London: Chelsea Polytechnic.

Manchester: University of Manches- r.—No Chemist and Druggist course. tober 4. Head of department: Professor Brindle, B.Sc., M.Sc., Ph.C., F.R.I.C.

Nottingham: The University. — No emist and Druggist course. October 8.

Plymouth and Devonport: Technical llege.

Portsmouth: Municipal College.

Sunderland: Technical College.

I. Degree Courses in Pharmacy

The following universities and colleges er courses for internal degrees in phar- cy:—

Cardiff: College of Technology. — harm. (University of Wales).

Glasgow: Royal Technical College. onours degree course for Bachelor of ence in Pharmacy.

Leeds: University of Leeds.—Degree rse in Pharmacology.

London: School of Pharmacy, Uni- sity of London, 17 Bloomsbury uare, London, W.C.1. Dean: Professor Berry, B.Sc., Ph.C., F.R.I.C., Dip. Bact. nd.). Bachelor of Pharmacy. Particulars n the Secretary.

Manchester: University of Manches- .—B.Sc. (Pharmacy).

Nottingham: The University.

The following technical colleges offer rses for the Intermediate Bachelor of Pharmacy (London) (external) examination:—

Aberdeen: Robert Gordon's Technical College.

Bradford: Technical College.

Brighton: Technical College.

Bristol: College of Technology.

Croydon: Polytechnic.

Dagenham: South-East Essex Technical College.

Dundee: Technical College.

Huddersfield: Technical College.

Hull: Municipal Technical College.

Leicester: College of Technology.

Liverpool: College of Technology.

London: Chelsea Polytechnic, Norwood Technical College, West Ham Municipal College.

Newport (Mon): Technical College.

Northampton: College of Technology.

Norwich: City College.

Plymouth and Devonport: Technical College.

Portsmouth: Municipal College.

Sunderland: Technical College.

The following technical colleges offer courses for the final Bachelor of Pharmacy (London) (external) examination:—

Aberdeen: Robert Gordon's Technical College.

Bradford: Technical College.

Brighton: Technical College.

Dundee: Technical College.

Leicester: College of Technology.

London: Chelsea Polytechnic.

Portsmouth: Municipal College.

Sunderland: Technical College.

IV. Examination Revision Courses

Halifax: Municipal Technical College.—Special classes in organic chemistry and in analysis of pharmaceutical materials provided there is sufficient demand from students who wish part-time study between intermediate and qualifying courses.

Huddersfield: Technical College. — Evening post-intermediate classes in pharmacognosy and dispensing.

Hull: Municipal Technical College. —Post-intermediate course (part-time day or evening) in pharmaceutics, pharmacognosy, physiology and chemistry. Also revision course (part-time day or evening) for students referred in Ph.C. or M.P.S. examinations.

London: Chelsea Polytechnic. — Evening preparatory and revision classes in

pharmaceutics, pharmaceutical chemistry and pharmacognosy.

Preston: Harris Institute.—Revision pharmacy course for students who have taken a full-time day course and require revision classes for Intermediate examination. There is also a preparatory course in chemistry for students waiting to take their final course.

Sunderland: Technical College. — One week revision course to be held in September, for candidates who intend to take the Chemist and Druggist Qualifying examination in September. Students who have passed the Intermediate examination of the Pharmaceutical Society and are serving their apprenticeship may take a part-time course in preparation for the full-time Qualifying examination course.

V. Post-graduate and Refresher Courses, etc.

Birmingham: Central College of Technology. — Full-time and evening courses in industrial bacteriology and analysis of foods and drugs.

Bradford: Technical College.—Facilities for post-graduate research. Consult head of department.

Brighton: Technical College.—Various courses on pharmaceutical and pharmacological developments.

Bristol: College of Technology. — Refresher courses to be arranged. Particulars from head of department.

Dagenham: South-East Essex Technical College. — A one-year course in biochemistry.

Glasgow: Royal Technical College. Courses in micro-biology leading to diploma or associateship of the college.

London: Acton Technical College.—Courses of twelve lectures on: "Some Aspects of the Recent Chemistry of Oils and Fats," September 28 at 7.30 p.m.; "Modern Concepts in Biochemistry," September 26 at 7.30 p.m. Particulars from the principal. Chelsea Polytechnic. — Short evening refresher and post-graduate courses. Prospectus free from head of School of Pharmacy. Norwood Technical College.—Short course in small-scale methods of chemical analysis.

Plymouth and Devonport: Technical College.—Provision will be made for establishment of refresher lecture and practical courses.

Portsmouth: Municipal College. — Evening course on "The physiological basis of pharmacology."

Sunderland: Technical College.— series of lectures on the physiological bas of pharmacology will be arranged durin the session. Send name and address o postcard to head of department for pa ticulars.

Diploma in Biochemical Analysi

The course for the Diploma in Bi chemical Analysis is concerned with th chemical examination of urine, blood, et Courses are available at:—

Birmingham: Central Technica College.

Bradford: Technical College.

Hull: Municipal Technical Colleg Evening course will be arranged if suf cient students apply.

Leicester: College of Technolo and Commerce.

London: Chelsea Polytechnic.

Nottingham: The University.

Portsmouth: Municipal College.

Sunderland: Technical College.

Apothecaries' Assistants

Complying with obligations laid down the Apothecaries Act, 1815, the Society Apothecaries of London, Black Friars Lan Queen Victoria Street, London, E.C. continues to issue "certificates of co petence to act as assistants in d pensing to licentiates of the Society Candidates for the examination are e amined in dispensing, chemistry, mate medica, forensic pharmacy, and the tra lation of prescriptions, and examinatio are held in January, April, June a October of each year. Courses (if sch not named refer to above lists):—

London: Northern Polytechnic; Woolwich Po technic; London College of Pharmacy, 7 W bourne Park Road, Bayswater, London, W.2. B fast: College of Technology. Blackburn: (Chem try only). Bradford, Bristol: Merchant Ventur Technical College, Unity Street, The Dispensa Bristol General Hospital, College of Technolo Cardiff, Coventry, Derby: (Chemistry only. M teria medica and dispensing might be arranged a hospital). Edinburgh: Chemical Laborato Royal Infirmary, Huddersfield, Hull, Leeds (p sibly from September 1951), Leicester, Liverpoo Central Technical College. Newark, Notts: Cou Technical College. Newcastle-on-Tyne: Ro Victoria Infirmary, Queen Victoria Road, Newpo Northampton, Norwich (chemistry only). C ford: Schools of Technology, Art and Comme (for residents of Oxford only). Plymouth, Po mouth, Sheffield: The Royal Sheffield Infirm and Hospital (T. P. Barker). Southend: Techn College. Stockport, Stoke-on-Trent, Sunderla Swansea, Wolverhampton and New Cross Hospi

Pharmacy (Irish Republic)

An applicant for registration as a pharmaceutical student in the Republic of Ireland must have obtained credit for English, Irish, Latin, mathematics and a fifth subject in the Leaving Certificate of the Department of Education of Ireland or the National Matriculation Examinations, *and in addition* the Society's Pre-registration examination in physics and chemistry. Candidates who have obtained credit for physics and chemistry in the Preliminary Examination are exempt from the Pre-registration examination.

Apprenticeship.—A registered student must serve four years as apprentice to a pharmaceutical chemist "keeping open shop" and must produce statutory declaration(s) signed by himself and by his master(s) when entering for a qualifying examination.

Syllabus. — A student is required to take lectures in the following subjects:—

PHARMACY: Weights and measures, methods of compounding, aseptic dispensing, preparation of galenicals, poisons law and the Dangerous Drugs Act, incompatibility, *p*H and its pharmaceutical importance, buffers and their application to eye preparations and injection solutions; toxicity and importance of isotonic solutions.

CHEMISTRY: Principles of physical chemistry. Preparation or extraction and properties of the commoner elements and their more important compounds. Isolation and purification of organic compounds. Detection and estimation of the elements in organic compounds. Classification of carbon compounds; preparation and properties of representatives of the various groups, aliphatic and aromatic, organic metallic compounds, terpenes, heterocyclic compounds, sulphonamides. *Practical:* Identification of simple salts and simple organic (especially those of pharmaceutical importance) compounds. Volumetric analysis.

MATERIA MEDICA, BOTANY AND ZOOLOGY: Identification, description, natural and geographical sources, family and chief constituents of certain vegetables and animal drugs. Collection and preparation of drugs for the market. Bacteriology, preparation of vaccines and toxins, storage of sera, bacteriological preparations. Hormones and vitamins. The elements of plant morphology, anatomy and physiology; classification of the vegetable kingdom. The structure and properties of animal cells, the principal animal tissues. The amoeba. Animal circulation, respiration, excretion, digestion and reproduction. Endocrine glands. Dissection of the rabbit.

Lectures may be part-time (over an extended period) or whole-time. Pharmacy lectures may be taken only in the Society's College; other subjects may be taken in approved establishments.

Assistants' Examination.—A registered student who has completed his period of apprenticeship may enter for an examination for the qualification of "Assistant to Pharmaceutical Chemist." This qualification entitles the holder to carry out the duties of a pharmaceutical chemist in the temporary absence of the latter but does not entitle him to conduct open shop. A candidate for the Assistants' Examination need not have completed lectures.

Licence Examination (Final). — A student who has completed the period of apprenticeship and who has obtained certificates showing credit for lectures and term examinations is eligible to enter for the Licence examination. A successful candidate is entitled to registration as a pharmaceutical chemist on payment of the registration fee (£10 10s.). An unsuccessful candidate may re-enter for examination after six months. A candidate who obtains 66⅔ per cent. of the total marks available may obtain a refer in pharmacy if he fails in one sub-section thereof and passes in all other subjects. A candidate who obtains 55 per cent. of the total marks available may obtain a refer in Chemistry, or in Botany, Materia Medica, and Zoology if he fails in one sub-section of either and passes all other subjects. A referred candidate is required to take the whole section.

Membership. — A successful candidate whose name is entered in the Register of Pharmaceutical Chemists is entitled to the suffix "L.P.S.I." He may apply for Membership of the Society (M.P.S.I.) and on election pays an annual subscription of £2 2s.

Proposed New Regulations

The Society intend, subject to consent by the Minister for Health, to introduce a new course in 1952. Under the new scheme a student will be obliged to spend a year in college studying for the First Professional examination in chemistry

(pharmaceutical and general), botany, zoology and forensic pharmacy. If he obtains credit for the First Professional examination he will be entitled to commence a three-year period of apprenticeship. At the conclusion of the apprenticeship period the student will return to college for a further year's study (the pharmacy course) which will entitle him to enter for the Second Professional examination. This examination will be in the subjects taken during the Pharmacy Course: theory of pharmacy (pharmacognosy, pharmaceutics, etc.), practical pharmacy, materia medica and forensic pharmacy. The successful candidate will be entitled to registration as a pharmaceutical chemist.

To help students who may not have qualified before the introduction of the new scheme it is intended to divide the present Licence examination into two parts which will correspond to the First and Second Professional examinations. This modification will probably be introduced in October 1952. A transition period of three or four years will be required to effect a complete change-over.

The following schools are recognised by the Society for lectures in theoretical and practical chemistry, botany, materia medica and zoology:—

College of the Pharmaceutical Society of Ireland.
School of Physic, Trinity College, Dublin.
University College, Dublin.
University College, Cork.
Queen's University, Belfast.
University College, Galway.
Crawford Municipal Technical Institute, Cork.
Institute of Science and Technology, Dublin.
Central Technical Institute, Waterford.
Municipal Technical Institute, Limerick.

The following are recognised for theoretical and practical chemistry:—

Royal College of Surgeons in Ireland, Dublin.
Municipal Technical School, Drogheda.
City of Galway Technical Institute.
Municipal Technical School, Dundalk.
Central Technical Institute, Clonmel.

Pharmacy (Northern Ireland)

Apprenticeship.—In order to qualify for registration as an apprentice in Northern Ireland a candidate must have passed either any United Kingdom matriculation examination or the Secondary School Senior Certificate examination of the Northern Ireland Ministry of Education in English, mathematics and three of the following subjects: Latin, Greek, French, German, domestic economy, modern history, geography, biology, chemistry, physics or mechanics. Apprenticeship comprises four years under articles with an emplo who is a registered pharmacist or w undertakes to appoint a registered pharm cist on his staff to supervise the studer work. During the final year of apprenti ship the student attends a full-time cour

Preliminary Scientific Examination Having served his apprenticeship a attended an approved course of instruct of not less than 750 hours, the candid must pass the Part 1 examination in che istry, physics and biology (entrance £6 6s. for the first entry and £4 4s. any subsequent entry).

Pharmaceutical Chemist Qualify Examination.—A candidate may proc to the qualifying examination without h ing passed Part 1 if he has passed the termediate B.Sc. examination in phart ceutics of the Queens University of Belf The subjects at the approved full-ti course are:—

PHARMACEUTICAL CHEMISTRY.—Prin ples of inorganic and organic chemis illustrated by compounds in frequent ph maceutical use. The characters, prepa tion and properties of the main types aliphatic and simpler aromatic (with single benzene ring) compounds. Princi underlying tests and assays of the Bri Pharmacopœia. *Practical:* Preparat and/or identification of certain orga compounds. Identification of the eleme and characteristic organic groups. I formance of B.P. tests. Volumetric alkaloidal (of simple solution only) ass

PHARMACOGNOSY.—Recognition of tain B.P. or B.P.C. drugs, their sour characters, active principles, varieties, adulterants; knowledge of B.P. and B.P tests.

PHARMACEUTICS.—Principles involved pharmaceutical operations. Galenical p parations included in the B.P. Biology bacteria so far as it affects the sylla Surgical dressings and their standard tion. Interpretation of prescriptions. M mum B.P. doses. *Practical:* Preparatio galenicals and of sterile medicaments. pensing of prescriptions and detection unusual doses.

PHYSIOLOGY.—An elementary knowle of (i) biochemistry of food and tissues, structure of various tissues and organs, properties of muscle, (iv) the nervous tem, (v) vision, (vi) the blood, (vii) heart and peripheral blood vessls, (respiration, (ix) digestion, (x) body h (xi) urine, (xii) endocrinology and (xiii) logical assays,

FORENSIC PHARMACY.—Knowledge of Acts relating to pharmacy in shop and hospital including the Dangerous Drugs, Therapeutic Substances, and Pharmacy and Poisons (Northern Ireland) Acts.

The examination is held each June and December. Entrance fees: First entry, £12 12s.; subsequently, £6 6s. A candidate who has passed or obtained exemption from the Preliminary Scientific examination and has passed the Final Part I for the B.Sc. in Pharmaceutics, Queens University, need only pass the examination in forensic pharmacy to qualify for registration as a Pharmaceutical Chemist.

The institutions approved by the Society for preparation for the Preliminary Scientific examination are:—

College of Technology, Belfast.
Municipal Technical College, Londonderry.
Technical School, Portadown.
Technical School, Coleraine.
Technical School, Larne.
Technical School, Omagh.

and for the Pharmaceutical Chemist Qualifying examination:—

College of Technology, Belfast.

Medicine

THE registration body for medicine in the United Kingdom is the General Medical Council 44 Hallam Street, London, W.1. The Council recognises various examining bodies and when a student has passed the final examination of one of these bodies he is entitled to registration as a medical practitioner.

Study occupies a minimum of five academic years after registration as a medical student. Registration is dependent upon first passing an approved examination in general education and a pre-medical examination in chemistry, physics and biology.

The principal universities in the U.K. confer degrees in medicine and surgery (M.B., Ch.B. or equivalent). Other examining bodies recognised by the Council are:—

THE ROYAL COLLEGE OF PHYSICIANS OF LONDON and THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, particulars from the Secretary, Examining Board in England, Examination Hall, Queen Square, London, W.C.1.

THE SOCIETY OF APOTHECARIES OF LONDON, particulars from the Registrar, Apothecaries Hall, Black Friar's Lane, Queen Victoria Street, London, E.C.4.

THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH and THE ROYAL FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW, particulars from the Registrar, 18 Nicholson Street, Edinburgh, or the Registrar, 242 St. Vincent Street, Glasgow, respectively.

The Medical Registration Council of Ireland recognises in addition to University degrees the qualification of THE APOTHECARIES HALL OF IRELAND, particulars from the Registrar, 95 Merrian Square, Dublin, C.17; and of THE ROYAL COLLEGE OF PHYSICIANS OF IRELAND and THE ROYAL COLLEGE OF SURGEONS OF IRELAND, particulars from the Registrar, 6 Kildare Street, Dublin, or the Registrar, St. Stephens Green, Dublin, respectively.

Medical Schools

THE principal medical schools in the United Kingdom and Ireland include the following:—

Aberdeen.—UNIVERSITY FACULTY OF MEDICINE, particulars from the Dean.

Belfast.—QUEENS UNIVERSITY OF BELFAST, particulars from the secretary.

Birmingham.—UNIVERSITY FACULTY OF MEDICINE, particulars from the Registrar.

Cardiff.—WELSH NATIONAL SCHOOL OF MEDICINE, 34 Newport Road, Cardiff, particulars from the secretary.

Cork.—UNIVERSITY COLLEGE, particulars from the Registrar.

Dublin.—ROYAL COLLEGE OF SURGEONS SCHOOLS OF SURGERY, particulars from the Registrar.—SCHOOL OF PHYSIC, TRINITY COLLEGE, particulars from the Registrar.—UNIVERSITY COLLEGE, particulars from the Registrar.

Dundee.—UNIVERSITY OF ST. ANDREWS FACULTY OF MEDICINE, particulars from the Dean.

Edinburgh.—UNIVERSITY FACULTY OF MEDICINE, particulars from the Dean.

Glasgow.—UNIVERSITY FACULTY OF MEDICINE, particulars from the Clerk of the Faculty.

Leeds.—UNIVERSITY FACULTY OF MEDICINE, particulars from the Dean.

Liverpool: UNIVERSITY FACULTY OF MEDICINE, particulars from the Dean.

London.—CHARING CROSS HOSPITAL MEDICAL SCHOOL, 62 Chandos Place, London, W.C.2, particulars from the Dean.—GUY'S HOSPITAL MEDICAL SCHOOL, London Bridge, London, S.E.1, particulars from the Dean.—KING'S COLLEGE HOSPI-

TAL MEDICAL SCHOOL, Denmark Hill, London, S.E.5, particulars from the Dean.—ROYAL FREE HOSPITAL SCHOOL OF MEDICINE, 8 Hunter Street, London, W.C.1, particulars from the Dean.—ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, London, S.W.1, particulars from the Dean.—ST. MARY'S HOSPITAL MEDICAL SCHOOL, Paddington, London, W.2, particulars from the Dean.—ST. THOMAS'S HOSPITAL MEDICAL SCHOOL, London, S.E.1, particulars from the Dean.

Manchester.—UNIVERSITY FACULTY OF MEDICINE, particulars from the Dean.

Newcastle-on-Tyne.—KING'S COLLEGE, UNIVERSITY OF DURHAM, particulars from the Dean.

Oxford.—UNIVERSITY MEDICAL SCHOOL, particulars from the secretary.

Dentistry

DENTAL practitioners are registered with the Dental Board of the United Kingdom, 44 Hallam Street, London, W.1. As in the case of medicine the principal universities confer degrees in dentistry (B.D.S. or equivalent) and students are entitled to registration upon graduation. The following bodies in the United Kingdom and Ireland conduct examinations the passing of which entitles a student to registration as a dentist in his own country:—

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, particulars from the Secretary, Faculty of Dental Surgery of the College, Lincoln's Inn Fields, London, W.C.2.

THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH, particulars from the Clerk to College, 18 Nicolson Street, Edinburgh, 8.

THE ROYAL FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW, particulars from the Registrar, 242 St. Vincent Street, Glasgow.

THE ROYAL COLLEGE OF SURGEONS IN IRELAND, particulars from the Registrar, St. Stephen's Green, Dublin.

The period of study for a degree course is five years and for a diploma course, four years. The conditions for registration as a dental student are the same as for medicine: the candidate is required to pass both an examination in general education and a pre-registration examination (biology is not required for the pre-registration examination of the Royal College of Surgeons of Edinburgh).

Dental Schools

THE principal dental schools in the United Kingdom and Ireland include t following:—

Belfast. — SCHOOL OF DENTISTR QUEEN'S UNIVERSITY FACULTY OF MEI CINE, particulars from the Secretary.

Birmingham.—SCHOOL OF DENTISTR UNIVERSITY FACULTY OF MEDICINE, p ticulars from the Director of Den Studies.

Cork.—UNIVERSITY COLLEGE FACUL OF MEDICINE, particulars from the De

Dublin.—SCHOOL OF DENTAL SCIEN TRINITY COLLEGE, particulars from Registrar, School of Physic, Trinity C lege.—UNIVERSITY COLLEGE FACULTY MEDICINE, particulars from the Dean.

Dundee.—UNIVERSITY OF ST. ANDRE DENTAL SCHOOL, particulars from Dea

Edinburgh.—UNIVERSITY FACULTY MEDICINE, particulars from the Director Dental Studies.

Glasgow.—UNIVERSITY FACULTY MEDICINE, particulars from the Direc of Dental Education.

Leeds.—SCHOOL OF DENTISTRY, U VERSITY FACULTY OF MEDICINE, parti lars from Warden of Dental School.

Liverpool.—SCHOOL OF DENTAL S GERY, UNIVERSITY FACULTY OF MEDIC particulars from the Director of De Education.

London.—GUY'S HOSPITAL DEN SCHOOL, particulars from the Dea KING'S COLLEGE HOSPITAL, DEN SCHOOL, particulars from the Dean.

Manchester.—DENTAL DEPARTMENT THE UNIVERSITY, particulars from Registrar.

Newcastle - upon - Tyne. — DEN SCHOOL, KING'S COLLEGE, UNIVERSITY DURHAM, particulars from the Dean.

Sheffield.—UNIVERSITY FACULTY MEDICINE, particulars from the Directo Dental Studies.

Science

SCIENCE courses are obtainable at following educational centres:—Aber University; University College of W Aberystwyth; University College Bangor; Barnsley Technical Coll Queens University and College Technology, Belfast; Birmingham Un sity and Central Technical College; B burn Municipal Technical College; ton Municipal Technical College; ford Technical College; Bridgend Te cal Institute; Brighton Technical Col Bristol University; Burnley Muni College; Cambridge University;

bridgeshire Technical College; University College of South Wales and Monmouthshire, Cardiff; Cardiff College of Technology; Mid-Essex Technical College, Chelmsford; Chesterfield Technical College; University College, Cork; Coventry Municipal Technical College; Technical College of Monmouthshire, Crumlin; South-east Essex Technical College, Dagenham; Derby Technical College; Doncaster Technical College; Trinity and University Colleges, Dublin; University College, Dundee; Science Laboratories of Durham Colleges, University of Durham; Edinburgh University and Heriot-Watt College; University College of South-west England, Exeter; University College, Galway; Medway Technical College, Gillingham, Kent; Glasgow University and Royal Technical College, Glasgow; Gloucester Technical College; Halifax Municipal Technical College; Huddersfield Technical College; University College, Hull, and Hull Municipal Technical College; Lancaster and Morecambe Technical College; Leeds University and Leeds College of Technology; Leicester University College and College of Technology; Liverpool University and City College of Technology; Birkbeck, Kings University, Queen Mary, Royal Holloway Colleges, London; Imperial College of Science and Technology, London; Bedford College for Women, London; Acton Technical College; Battersea, Borough, Chelsea, Northampton, Northern, Regent Street and Woolwich Polytechnics, London; Northod Technical College, London; Sir John Cass College, London; South-west Essex Technical College, Walthamstow; West Ham Municipal College, London; Loughborough Technical College; Victoria University and College of Technology, Manchester; Constantine Technical College, Middlesbrough; Kings College of Rutherford College of Technology, Newcastle-on-Tyne; Technical College, Newport (Mon); Technical College, Northampton; City College, Norwich; University College, Nottingham, and Nottingham and District Technical College; Oxford University; Paisley Technical College; Plymouth and Devonport Municipal Technical College; Portsmouth Municipal College; Harris Institute, Preston; Reading University; Rochdale Technical School; Rutherham College of Technology; Rugby College of Technology; St. Andrews University; St. Helens Municipal Technical College; Royal Technical College, Salford; Sheffield University; Southampton University College; Southend Municipal College; Stockport College for Further Education; North Staffordshire Technical College, Stoke-on-Trent; Sunderland Technical College; University College of Wales, Swansea; Glamorgan Technical College, Treforest; Whitehaven Technical Institute; Widnes Technical College; Wigan and District Technical College; Wolverhampton and Staffordshire Technical College; Denbighshire Technical College, Wrexham.

Manchester: TUTORIAL COLLEGE, LTD. (GRIME'S). Tuition in pharmacy and general science subjects. Details from principal.

Optics

THERE are five examining bodies concerned with the career of ophthalmic opticians: The Worshipful Company of Spectacle Makers, the British Optical Association, the National Association of Opticians, the Scottish Association of Opticians, and the Institute of Optical Science. Full-time courses for the examinations generally extend over three years and part-time over five years. Details of examination syllabuses, etc., may be obtained from the bodies concerned.

Veterinary Surgery

UNDER the Veterinary Surgeons Act, 1948, no person may practise veterinary surgery in Great Britain and Northern Ireland unless entered on the Register of Veterinary Surgeons. There are two principal methods of entry to the register; one is by taking the diploma of membership of the Royal College of Veterinary Surgeons (M.R.C.V.S.) and the other is by obtaining the veterinary degree of a United Kingdom university, which is recognised under the Veterinary Surgeons Act, 1948, for registration. Particulars may be obtained from the Secretary of the College, 9 Red Lion Square, London, W.C.1.

Chiropody

To gain admission to National Register of Medical Auxiliary Services, it is necessary to pass the examination of the Society of Chiropodists, 21 Cavendish Square, London, W.1.

CORRESPONDENCE

Wrapped Medicines

SIR,—Your article on Harrogate pharmacies (*C. & D.*, July 21, p. 78) includes the following paragraph:—

To cater for them, there are numerous pharmacies working to high pharmaceutical standards: in most, for example, medicines are handed out wrapped whether prepared to National Health Service or private prescriptions.

This is "priceless." All N.H.S. medicines, even throughout the war were, in this area, issued wrapped. Seemingly it is time Yorkshire awakened.

Crawley. SADLER THE CHEMIST.

Conduct of a Meeting

SIR,—In reply to the letter from the secretary of the Pharmaceutical Committee for Surrey in answer to our letter published, in part, last week (*C. & D.*, July 28, p. 119) concerning the conducting of a recent meeting in Bloomsbury Square, we should like to point out the following:—

(a) The chairman may have intended to convey that they would be bound by the feelings of the meeting but in actual fact he said: "The committee's decision had been reached and they would like the unanimous approval of the meeting so that the delegates could go forward with the knowledge that they had the backing of the members." The committee's decision was, in fact, disclosed to the meeting before the vote was taken.

(b) No mention was made of the fact that the Surrey pharmacists had the final word.

(c) On several occasions one or other of the signatories were about to speak when another member made the point and it was not considered necessary to burden the meeting with repetition. The signatories made their position perfectly plain, in the face of some derision from the platform, when the vote was taken.

We consider the secretary's reply to be entirely inadequate and not to the point. It was unfortunate that pressure of space caused the following to be omitted from our original letter:—

"Frankly we deplore the attitude of accepting a take-it-or-leave-it-or-else offer by the Ministry and the lack of spirit—dare we say 'guts'?—in opposing the offer, even if it were a reasonable return for services rendered. As for financial embarrassment being the reason for acceptance, we feel in that case that, whatever the payment, the result would be the same, and would suggest that a drastic overhaul of business methods would prove to be the answer . . . What is of importance is that, in place of a contract, the terms of business on which pharmacists entered the scheme are arbitrarily changed by the Ministry, who then take up this pistol-to-the-head attitude, all but refusing arbitration—which they would not dare do with the "workers'" trade unions!—an attitude and way of conducting affairs hitherto untried in this country."

It would appear, from subsequent events, that in several instances committees have taken decisions which have gone forward as the unanimous wish of all contractors in various areas. We repeat that a referendum of contractors in England and Wales would show a less spineless decision.

Walton. T. R. GOVER,
Tadworth. M. G. BLOODWORTH,
Tadworth. J. RUSSELL.

SIR,— I have read with great interest and considerable astonishment the letter in your edition of July 28 (p. 119) by three pharmacists of Walton-on-the-Hill and Tadworth concerning the meeting of Surrey pharmacists on July 18 to discuss the offer by the Ministry of Health. Before commenting on it I would like to make it clear that I have no connection with the Surrey Pharmaceutical Committee. I endorse Mr. Wilson's letter published in the same issue, but add to his first comment on the chairman's opening speech the fact that he clearly stated that he did not wish to announce the Pharmaceutical Committee's decision until after a discussion and a vote, because he did not wish to influence the meeting. At no time did the chairman or any member of the committee make any suggestions that any speech would be unwelcome. The committee's decision was announced at the end of the discussion before the vote was taken, but then only at the request of the meeting. When the vote was taken, out of over one hundred members present only ten voted against. The complaint by the three pharmacists that the committee made no statements in favour of the rejection of the offer is in fact an admission that the meeting was run fairly. The committee expressed no views at all until asked for their decision, but confined themselves to giving facts and figures when asked. In my opinion the meeting was unfair.

Yours faithfully,
V. RIDOUT.

TRADE REPORT

Spot quotations for pharmaceutical chemicals represent the prices for wholesale quantities of standard quality. Prices of crude drugs and essential oils vary as to brand or grade.

London, August 1

TRADING in PHARMACEUTICAL and FINE CHEMICALS is rather quiet, with a number of works closed down for the annual holiday while others have only a skeleton staff to deal with urgent inquiries. ACETONE has been increased by £25 per ton. Shortage of home-produced TOLUENE has obliged some manufacturers of fine chemicals to import supplies from the Continent, at higher cost compared with British material, largely as a result of this BENZOIC ACID and SODIUM BENZOATE are dearer by twopence per lb. Increases are also reported for BENZALDEHYDE and BENZYL BENZOATE of threepence per lb., while MANDELIC ACID and its CALCIUM SALT have also advanced by the same amount. ZINC SULPHATE and ZINC ACETATE have been brought into line with the higher cost of metal. In keeping with conditions in other commodity markets CRUDE DRUGS remain quiet with not much business done during the past week. Rather lower prices are asked for new-crop French GENTIAN. Less money has been asked for SENEGA for shipment though the market has firmed up again with reports that hot weather together with corn harvest operations had suspended root collection; it is thought that senega prices are not likely to decline. In the SPICES market, Zanzibar CLOVES were quoted dearer when it was announced that the export duty was to be raised from Shs. 25.61 to Shs. 51.47 per 100 lb., with effect from October 1. New-crop Aleppy greens CARDAMOMS are little cheaper for shipment. SHELLAC has been in better demand and the market is firmer; spot prices have risen. There has been a very limited demand for ESSENTIAL OILS. Spot ANISE and Ceylon CITRONELLA are slightly lower in price.

U.S. Drug and Chemical Report

New York, July 27

DEMAND for CRUDE DRUGS is still somewhat quiet, though prices of such articles as SENEGA, CASCARA SAGRADA and PODOPHYLLUM ROOT are well maintained. Some dealers in HYDRASTIS ROOT have prepared to shade prices but the long-term outlook is firm with a rise of replacement costs expected. SERPENTARIA is difficult to obtain and prices are nominal. IPECACUANHA is a firm market and prices are expected to rise further. In other directions buyers are holding off in expectation of lower-priced new-crop supplies. The Portuguese ERGOT crop promises to be good and prices should soften. There has been little demand for MENTHOL and the market is weak. Trade in WAXES is dull and prices have fallen. An easier market is reported for ESSENTIAL OILS. A large consignment of BOIS DE ROSE arrived recently from Brazil. CITRONELLA is weaker with little buying interest. Lower prices are expected for French LAVENDER and LAVANDIN, though many French FLORAL OILS are firm as supplies are expected to be small for some time. The FINE CHEMICALS market remains quiet.

Pharmaceutical Chemicals

ACETONE.—In short supply. Prices increased by £25 per ton. Under 1-ton lots are from 110s. per cwt.

ASCORBIC ACID.—1-kilo lots for the home trade are £14 per kilo; 500-gm., £14 10s. per kilo.

ASPIRIN. — Prices are as follows:—5-cwt. lots, 4s. 10d. per lb.; 1-cwt., 4s. 10½d.; 28-lb. and under 1-cwt., from 5s. 8d. to 6s., according to pack. Rates per 1,000 for TABLETS are as follows:—Under 5,000, 5s. 0½d.; 5,000 and over, 4s. 10½d.; 10,000, 4s. 9½d.; 25,000, 4s. 7½d.; 100,000, 4s. 5½d.; 250,000, 4s. 5d.; 500,000, 4s. 4½d.; 1,000,000, 4s. 3½d.

BARBITONE.—1-cwt. lots are now 39s. per lb.; 28-lb., 40s. per lb. SODIUM is 1s. per lb. more than above rates.

BARIUM SULPHATE.—1-cwt. lots of B.P. (*x-ray*) are now 1s. 5d. per lb. Scheduled rates per lb. (containers in brackets) for quantities between 28 lb. and 1 cwt. are as follows:—1s. 8d. (28-lb.); 1s. 9d. (14-lb.); 1s. 9½d. (7-lb.); 2s. (1-lb.).

BENZOCAINE.—28-lb. lots are now 44s.; 14-lb., 45s.; and 7 lb., 47s. 6d. per lb.

BENZENE. — B.P.C. grade is quoted at 5s. 3d. per gall.; thiophene-free, 7s. 6d. per gall.

BENZOIC ACID.—Prices have risen twopence per lb. 1-cwt. lots are now 3s. 0½d. per lb. The SODIUM SALT is now 2s. 10½d. per lb. in 1-cwt. lots.

BRUCINE.—ALKALOID is from 1s. 8d. to 1s. 9½d. per oz., and NITRATE and SULPHATE from 1s. 7d. to 1s. 8½d. per oz., as to quantity.

CALCIUM GLUCONATE. — Quantities of 3 cwt. and upwards are quoted at 4s. per lb.; 1 cwt. to 2 cwt., 4s. 1d.; smaller quantities, up to 4s. 4d. per lb.

CITRATES.—The present rates (per lb.) are as follows:—POTASSIUM, 1-cwt. lots, 3s. 10½d.; 28-lb., 4s. 9d.; SODIUM, 1-cwt., 3s. 3½d.; 28-lb., 4s. 1d. (powder one penny more). IRON AND AMMONIUM, scale, 1-cwt., 4s. 3½d.; 28-lb., 5s. 4d. (granular one penny less).

CREAM OF TARTAR.—Rates (per cwt.) for the home trade are as follows:—10-cwt. lots, 252s.; 5-9 cwt., 253s.; 2-4 cwt., 254s; 1-cwt., 255s.; delivered.

DDT.—1-cwt. lots are now quoted at 4s. 0½d. per lb.

DEXTROSE. — Rates for MONOHYDRATE, B.P. (quantities under 5-cwt.) are: 1-lb. packets, 22s. 6d. per doz.; 7-lb. tins, 13s. 3d. each; 14-lb. tins, 25s.; 28-lb. tins, 47s.; less 12½ per cent. to wholesalers; delivered. In quantities of 5-cwt. and over, 7-lb. tins are 1s.; 14-lb. tins, 1s. 6d.; and 2s. less than above prices. ANHYDROUS, B.P. (quantities under 5-cwt.) prices as follows:—7-lb. tins, 13s. 9d.; 14-lb. tins, 26s.; and 28-lb. tins, 49s.; less 12½ per cent. to wholesalers; delivered. Reductions for quantities of 5-cwt. and over are the same as for monohydrate.

EPHEDRINE.—In 100-oz. lots ALKALOID is 15s.; HYDROCHLORIDE, 10s. 6d.; and SULPHATE, 11s. per oz.

GLYCEROPHOSPHATES.—Rates per lb. for 28-lb. lots are as follows: ACID, 20 per cent., 8s. 10d.; CALCIUM, soluble, B.P.C., 14s. 9d.; IRON, B.P.C., scale, 17s. 9d., and powder, 16s. 9d.; MAGNESIUM, soluble, B.P.C., 21s. 6d., and insoluble, 12s. 3d.; MANGANESE, 30s.; POTASSIUM, 50 per cent., 6s. 1d., and 75 per cent., 8s. 6d.; SODIUM, 50 per cent., 4s. 8d., and 75 per cent., 6s. 6d.

GUAIACOLS.—Liquid and crystal are from 16s. 6d. to 17s. 6d.; and carbonate from 17s. 6d. to 18s. 6d. per lb.

HEXAMINE. — Current quotations from makers are from 2s. 3d. to 2s. 6d. per lb., as to quantity and pack.

KAOLIN.—In 1-cwt. bags, LIGHT is quoted at 90s. per cwt., and HEAVY at about 25s. per cwt.

LACTATES. — CALCIUM, B.P., is 2s. 9d. per lb. in 1-cwt. lots; 28-lb., 3s. 1d.; 7-lb., 3s. 5d. per lb. CALCIUM SODIUM, B.P., for the same quantities is 4s. 1½d., 4s. 5d. and 4s. 9½d. per lb. LACTIC ACID, B.P., in 12 winchester lots is 4s. 6½d., 6 winchesters, 4s. 10d. and 3 winchesters, 5s. per lb. Carboys are 4s. 5d. per lb.

MANDELIC ACID.—Prices have risen by threepence per lb. 1-cwt. lots in 28-lb. containers are now 10s. 9d. per lb. The CALCIUM SALT is also 10s. 9d., while SODIUM is 11s. 3d. per lb., for 1-cwt. lots.

SALICYLIC ACID.—Prices are: 5-cwt. lots in bulk, 2s. 11½d. per lb.; 1-cwt., 2s. 11d. Scheduled rates for quantities of 28-lb. and under 1-cwt. are from 3s. 7d. to 3s. 11d. as to pack.

THEOPHYLLINE. — Prices of ALKALOID are from 52s. 6d. to 60s. per lb., as to quantity. AMINOPHYLLINE is from 57s. 6d. to 65s. per lb.

ZINC SULPHATE.—1-cwt. lots are quoted at 1s. 4d. per lb.; 28-lb., 1s. 7d.

Crude Drugs

ALOES.—Prime Cape on the spot is qu ted at 275s. per cwt.; for shipment, 25 to 235s., c.i.f. No offers of Curaçao.

ANISE (STAR). — July-August shipme from Hong Kong is 245s., c.i.f., nomina 290s. per cwt. is asked for supplies bond London.

ASAFŒTIDA.—Persian block is £22 1 per cwt., duty paid, on the spot.

BELLADONNA.—Root on the spot is fr 3s. 6d. to 4s. and leaves from 5s. 6s. 3d. per lb., as to test.

BENZOIN.—Quiet. No. 1 Sumatra bl on the spot is quoted at £28 per cw for shipment, £24 15s., c.i.f. Siam f almonds (medium) are offered at 37s. per lb., ex warehouse.

CAMPHOR. — Chinese (B.P.) powder the spot is from 5s. 4d. per lb., in b (5s. 10½d., duty paid); ¼-oz. tablets the spot are from 7s. per lb., duty paid

CARDAMOMS. — New-crop Aleppy gre for October-November shipment, is quo from the origin at 18s. 6d. per lb., c.i for November-December, 17s. 9d. per c.i.f. Aleppy seeds, No. 1, on spot, 32s.

CASCARA SAGRADA. — New-peel Ameri bark for shipment is quoted at 280s. cwt., c.i.f. 1950 bark on the spot is 3 per cwt., duty paid.

CINNAMON. — For shipment (c.i. OOOO, 3s. 2d.; OOO, 3s. 0½d.; 2s. 11½d.; O, 2s. 10½d.; firsts, 1s. 1 seconds, 1s. 10d.; thirds, 1s. 9d.; fou 1s. 8d.; quillings, 1s. 8d.; featheri 11½d., chips, 5d. per lb.

CLOVES.—Zanzibar on spot, quote 4s. per lb.; for prompt shipment, 4s., c September-October shipment, 3s. 9d., Madagascar is nominally 3s. 6d. per spot, in bond; forward, 3s. 3d. per c.i.f.

ERGOT. — Portuguese new-crop August-September is reported offerin about 39s. 6d. to 40s. per lb., c.i.f.

GENTIAN.—French on spot is quote 130s. to 135s. per cwt.; new-crop roo shipment, 110s., c.i.f.

GRINDELIA.—A parcel of f.a.q. he offered in London at 285s. per cwt wharf.

GUM ACACIA.—Kordofan cleaned sor spot, quoted at 132s. 6d. per cwt.; the origin for shipment, 121s., c.i.f. sellers, 120s., c.i.f.).

HONEY. — Australian supplies r scarce on the spot; prices are 92s cwt. in 60-lb. tins. Jamaican is o at around 104s. per cwt. in 3-cwt. ba while Argentine is 88s. per cwt. in 5 barrels, both ex warehouse.

IPECACUANHA.—Colombian is quot 53s. per lb., c.i.f., for shipment. No of Nicaraguan from source.

PERU BALSAM.—Little available on the spot. For shipment from San Salvador, 5s. to 17s. per lb., c.i.f., quoted; afloat, 7s. 6d., c.i.f.

SABADILLA.—A parcel of seed afloat is quoted at 6s. 9d. per lb., c.i.f. London.

SARSAPARILLA.—Jamaican native red is quoted at 2s. 7d. per lb. ex warehouse London; for shipment, 2s. 4½d. per lb., c.i.f.

SEEDS. — All sections of this market during the past week have been quiet with practically no business reported. ANISE.—Spot Cyprus is 162s. 6d. per cwt. Turkish, 10s. per cwt. in bond and 160s. per cwt., duty paid. CARAWAY. — Dutch offered at 55s. per cwt., duty paid, spot London. CELERY.—Indian is quoted at 1s. 10½d. per lb., spot London. CORIANDER.—Morocco new-crop is now offering, spot London, at 105s. per cwt., duty paid; Indian, 70s. per cwt., spot London. Shipment: Morocco for August shipment is 76s. per cwt., c.i.f. London, and for August-September shipment, sellers are prepared to take bids of 72s. 6d. per cwt., c.i.f. CUMIN.—Spot Cyprus is quoted at 240s. to 245s. per cwt.; Indian, 237s. 6d. to 240s. per cwt.; shipment: Cyprus, after nearly advancing to 220s., c.i.f. London, have now back at 200s. per cwt. Indian is quoted at 195s. per cwt., c.i.f.; Morocco nominal at 200s. per cwt., c.i.f. DILL.—Indian is in poor demand at 80s. per cwt., spot London. FENNEL.—A little more interest has been shown in Indian but no business is reported at the price of 140s. per cwt., spot London. FENUGREEK.—Morocco on spot is offered as low as 46s. per cwt., duty paid in London or Liverpool, but there are no buyers at this figure.

FENEGA.—After easing slightly the shipment market recovered again and quotations are now from 14s. 3d. to 14s. 6d. per lb., c.i.f.

SENNA.—Tinnevelly wet-crop leaves for July-September shipment are quoted as follows:—Prime No. 1, 1s. 3¼d.; No. 2, fine, 1s. 1¼d., and f.a.q., 1s. 0¾d.; No. 3, fine, 11½d., f.a.q., 11d.; No. 4, cleaned, and f.a.q., 8⅝d. per lb., c.i.f. A parcel of hand-picked Alexandria pods now landed is offered at from 5s. 6d. to 7s. per lb., according quality.

SHELLAC.—Firm. Spot quotations are: T.N., pure, 375s.; F.O. Standard 1, and fine orange, 410s. to 485s. per cwt., ex-London warehouse.

SQUILL. — Italian white new-crop is offered from origin at 57s. 6d. per cwt., c.i.f. London.

STAPHISAGRIA. — Stavesacre seeds are offered at 3s. 8d. per lb., duty paid, ex warehouse London.

TRAGACANTH.—Quiet. No. 1 ribbon on the spot is £195 per cwt.; No. 2, £170; No. 3, £145.

Essential and Expressed Oils

ALMOND. — English-expressed is from 6s. 6d. to 7s. 6d. per lb. Bitter essential oil (s.a.p) is from 26s. per lb., upwards, as to grade.

ANISE.—Quiet. Spot quotations are from 11s. 3d. to 12s. per lb.; for shipment, 11s. 3d., sellers, c.i.f.

CITRONELLA.—Quiet. Ceylon is quoted at from 12s. per lb., spot; for July-August shipment, 10s. 7½d., c.i.f. Java on spot is quoted at 12s. 6d. per lb.; for shipment, 10s., c.i.f.

CLOVE.—English-distilled bud oil is from 30s. to 31s. per lb., with other grades of B.P. oil at about 27s. 6d. Madagascar leaf oil to come forward, 14s. 9d. per lb., c.i.f.

LEMON. — Sicilian hand-pressed (4 per cent. citral) is quoted from the origin at 70s. per lb., c.i.f.

LEMONGRASS.—Spot quotations are from 23s. 6d. per lb.; for August-September shipment, 20s. per lb., c.i.f.

PEPPERMINT. — Chinese *arvensis* oil on spot is 33s. to 34s. per lb.; afloat, 31s. to 32s., c.i.f., as to position. Brazilian on spot is 28s. per lb. Continental "Mitcham" *piperita* is offering at about 60s. per lb., while American B.P. oil is from 62s. to 70s. per lb., ex warehouse.

WORLD TRADE

Norwegian Export Duties.—The export of pure sulphur, pyrites and copper from Norway became subject to duty on August 1.

Swiss Chemical Exports Increase.—The value (in million Swiss francs) of exports of the chemical and pharmaceutical industries from Switzerland in June increased to 73.5 against 61.8 in May. The value of pharmaceutical shipments abroad advanced from 20.6 to 30.1.

French Sulphuric Acid Plant.—Work has been completed on a sulphuric acid plant at La Pallice, western France, and production will start soon. The factory replaces one destroyed by the Germans during the 1939-45 war and its output is expected to be 12,000 to 15,000 tons a year.

Brazilian Carnauba Wax.—Brazilian production of carnauba wax from the 1950-51 crop amounted to approximately 12,570 short tons (nearly 300 tons more than in the previous year). Factors primarily responsible for the better harvest were: extremely favourable prices (the warehouse price was almost double the price offered early in 1950), and the drought in north-eastern Brazil from December 1950 to March.

TRADE MARKS

(From the "Trade Marks Journal," July 11)

For pharmaceutical preparations and substances (5).
GOLDEN RAY, B698,249, by Arthur Blasdale, Worthing. THEUM-ADREN, 698,562, by Stanning Proprietaries, Ltd., London, W.1.

For all goods (5).
CASODEX, 698,316, by Macleans, Ltd., Brentford. ADACTHIN, 698,924, by the Crookes Laboratories, Ltd., London, N.W.10.

For laxative preparations (5).
BEKOL, 698,728, by Macleans, Ltd., Brentford.

For rubber enemas (10).
STERENEMA, 695,584, by the Leyland & Birmingham Rubber Co., Ltd., Preston.

For surgical stockings, anklets, kneecaps and leggings. (10).
VERLONET, 698,209, by Thomas Glover & Sons, Ltd., Nottingham.

For sponges (21).
ENKA, 692,116, by Algemene Kustzijde Unie Naamlooze Vennootschap, Arnhem, Holland.

(From the "Trade Marks Journal," July 18)

For non-medicated toilet preparations (3).
INDOLA, 695,279, by Indola N. V., Voorburg. DUVETYN de RODIER, 698,118, by Rodier (Perfumes), Ltd., London, W.1.

For perfumes and non-medicated toilet powder (3).
CASANOVA, B668,077, by Société Anonyme Grenoville, Asnières.

For preparations of d-tubocurarine chloride for medicine and pharmacy (5).
TUBARINE, 676,625, by the Wellcome Foundation, Ltd., London, N.W.1.

For all goods excluding adhesive plaster or bandages (5).
SANPIC, 695,838, by Reckitt & Colman, Ltd., Hull.

For veterinary eye ointment (5).
OCULENE, 697,372, by Bob Martin, Ltd., Southport.

LOCAL OFFICERS

OFFICERS of local pharmaceutical asso tions, branches of the Pharmaceut Society and National Pharmaceut Union and local pharmaceutical com tees elected recently are given below:

Isle of Wight Branch.—*Chairman,* W. G. F. Sutton; *Vice-chairman,* Mr. Smith; and *Secretary,* Mr. J. C. Sparr 17 High Street, Cowes, Isle of Wight.

Liverpool Association and Branch *President,* Mr. W. E. Shepherd; *Vice-sident,* Mr. J. P. Murphy; *Treasurer,* W. E. Humphreys; and *Secretary,* H. W. Cottle, 12 Beacon Lane, Ever Liverpool, 5.

London Pharmaceutical Committe *Chairman,* Mr. C. Evans; *Vice-chairr* Mr. R. Collings; and *Secretary,* Mr. W Wilkinson, 10 Kingsway Crescent, N Harrow, Middlesex.

Southampton Branch.—*Chairman,* K. F. Young; *Vice-chairman,* Mr. E. Jenkins; *Treasurer,* Mr. G. Duncan; *Secretary,* Mr. J. Swan, 6 Fernlea dens, Bassett, Southampton.

West Kent Branch.—*Chairman,* S. M. Lennox; *Vice-chairman,* Mr. Hamer; *Secretary,* Mrs. N. E. D. Go Pharmaceutical Department, Becker Hospital, Croydon Road, Becken Kent; and *Treasurer,* Mr. A. W. Jutt

Wolverhampton Branch. — *Chair* Mr. J. J. F. Taylor; *Vice-chairman,* D. Walton; *Treasurer,* Mr. C. M. Wa and *Secretary,* Mr. A. E. A. Thomas Castlecroft Road, Wolverhampton.



OVERSEAS CONFERENCE.—The European branch of Parke, Davis & Co., Ltd., recently held at Ho a conference of some of their representatives from Europe, the Near East and Africa. The conferen the company's third conference of overseas delegates to be held this year, and followed similar m in Cairo and Johannesburg. Visiting representatives and Hounslow executives were entertained to in Old Tithe Barn, Great Fosters, nr. Egham, Surrey, under the chairmanship of Mr. L. O. Smith (Eu manager), with Mr. D. E. Mitchelson (treasurer), Dr. L. A. Sweet (director of research) and Dr. Crooks (leader of research team which synthesised Chloromycetin), as guests from Detroit.



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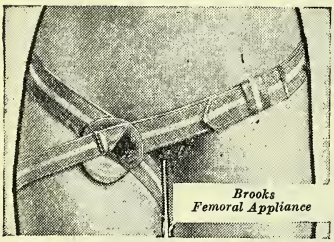
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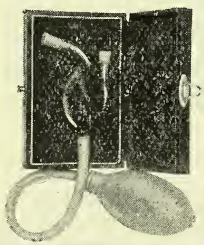
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While the sun shines

. . . you can enjoy record sales of BEACH! This pleasant non-greasy sun tan cream is going to be more popular than ever this year. The advertisement shown here will appear during the summer in the 10-million-a-day-readership DAILY MIRROR, the holiday-makers' favourite paper. Back up this advertising by displaying this fine showcard (available on request). It's a full-colour drawing by the well-known artist Tage Werner.



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Trade Price
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Special terms—
5% *discount on* 3 *doz.*
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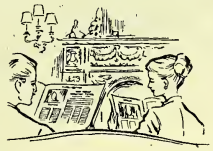
THE BRITISH DRUG HOUSES LTD. LONDON N.1

Bronnley Beauty BULLETIN

Regular Feature for the Discriminating Chemist

★

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In our last bulletin we said we would enlarge upon the aspect of "Constant reminder advertisements in journals appealing to a discriminating public."

These papers regularly carry Bronnley advertising and are read by leaders of good taste . . .

1. Top-class Sunday papers as *Sunday Times* and *Observer*.
2. Authoritative daily papers as *The Times* and *Scotsman*.
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4. Fashion journals as *Vogue and Harper's Bazaar* and *Queen*.
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A BOUQUET



Kenneth L. Graham, Design Editor of the *Packer & Shipper*, writes:—"... A review of those selected 'Men of Discernment' products can offer nothing but Festival cheers and praise. The wooden bowl of shaving soap, also the carton, is perfect . . . The colour of the wood is nostalgic. Something of cricket, bowls, your favourite pipe, a violin—perfect. . . ." He continues to praise the Men's soap and bottled products in similar vein . . . "this bottle still stands as one of the best glass containers of this century . . ." We are honoured by such praise from so eminent an authority.

THE PHOENIX RISES FROM THE FLAMES

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CONCLUSION

The first of mortal joys is health, next beauty, and the third is wealth.

By Appointment Toilet Soap Makers to H M King George VI H Bronnley & Co. Ltd.



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Albolene cleansing cream

NEW PACK!
Smart, feminine and clean — with plenty of shelf appeal and the "BUY ME" look.

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Down to a price that's in tune with the times. Down to only 2/9 — including tax.



NEW BUSINESS!
Old customers still clamouring—new ones on the way. And National Advertising to keep them buying.

It's a wonderful line in cleansing creams, this Albolene, but we haven't enough to satisfy everyone. Remember, it will be 'first come — first served' for Chemist and Customer. Send in your order for the new 'Trial' size NOW!

Retail:— 2/9 per tin, inc. tax.
Trade:— 26/8 per doz. inc. tax.

Also available in 'Boudoir' size
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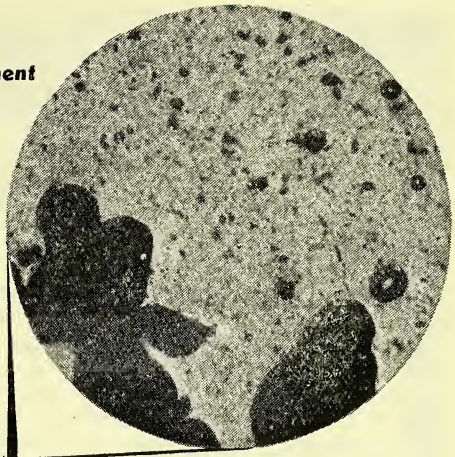
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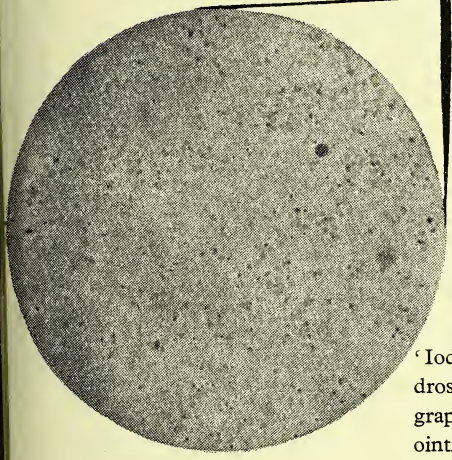
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Photographic evidence of the superiority of 'Iodex'





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'Iodex' non-staining iodine ointment

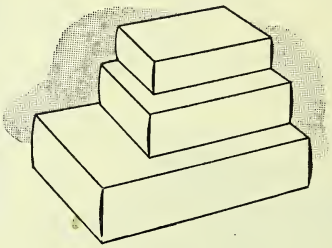
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Potter's Asthma Smoking Mixture	1/6	10/6	3/6
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Thompson's Dandelion Coffee Essence	1/4	10/9	,,
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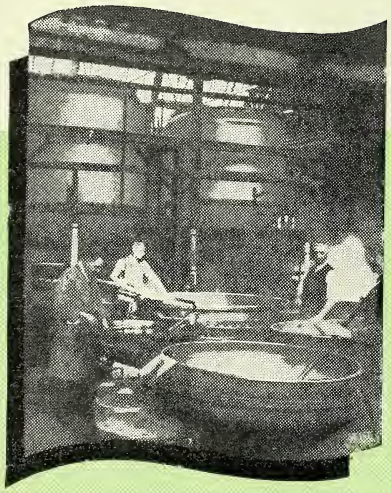
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B

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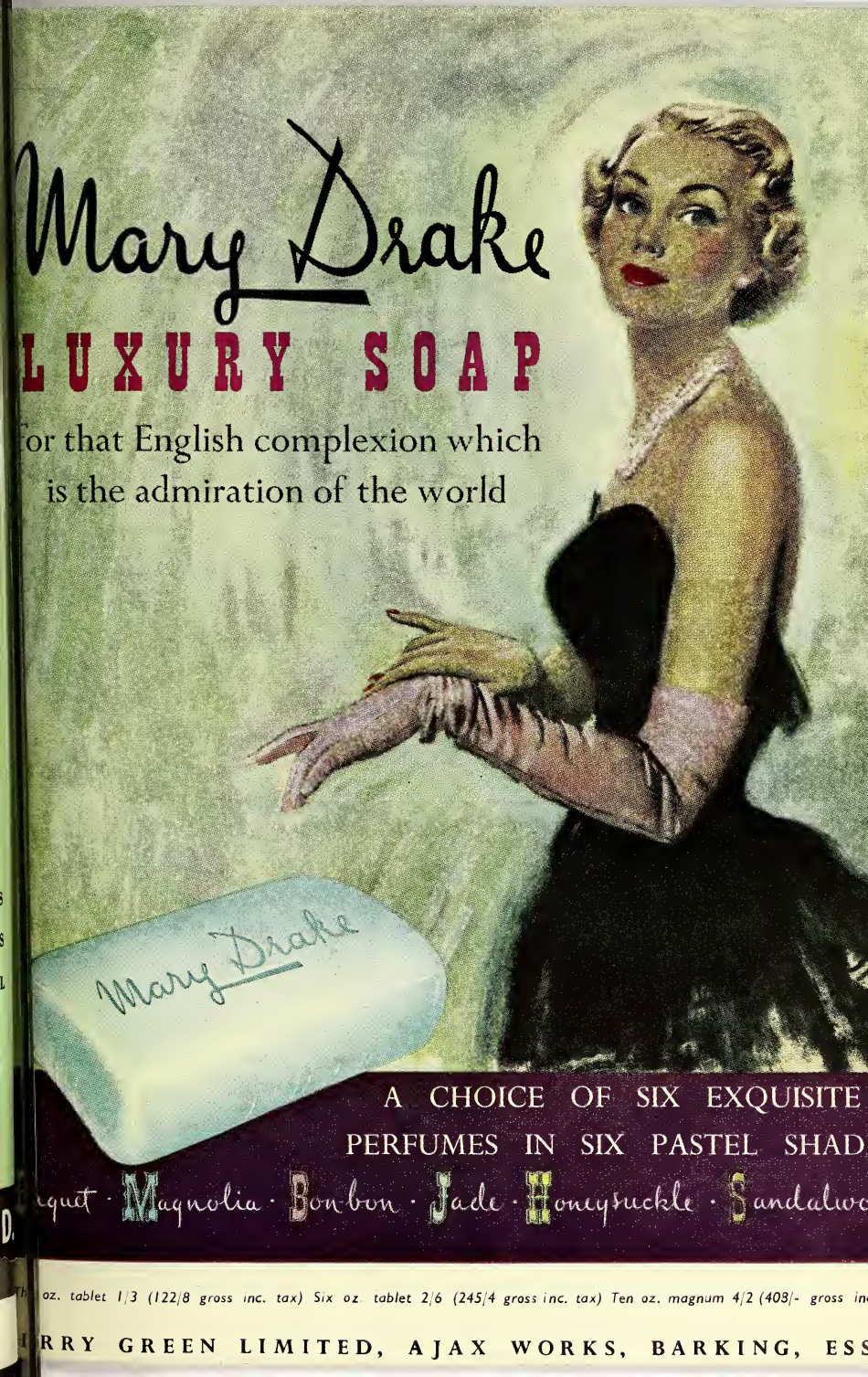
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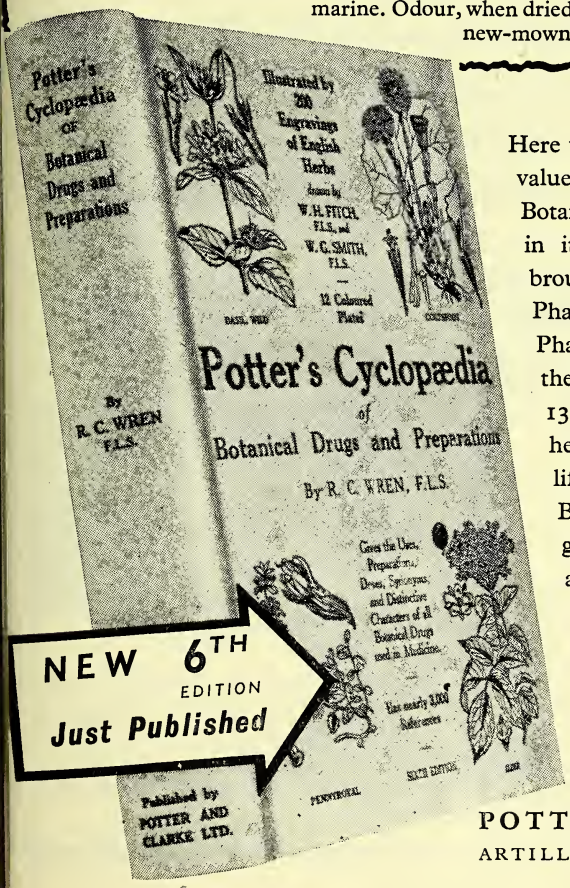
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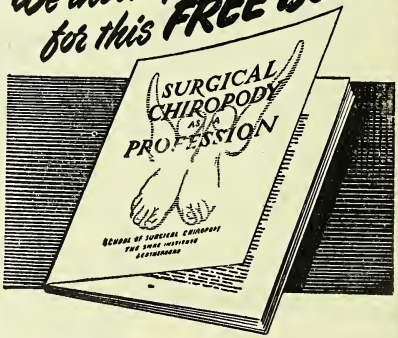
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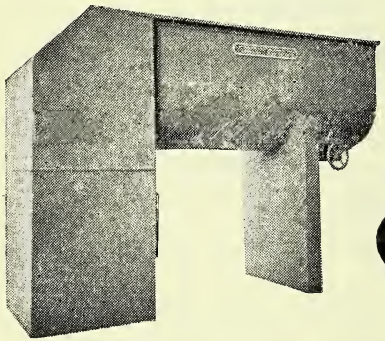
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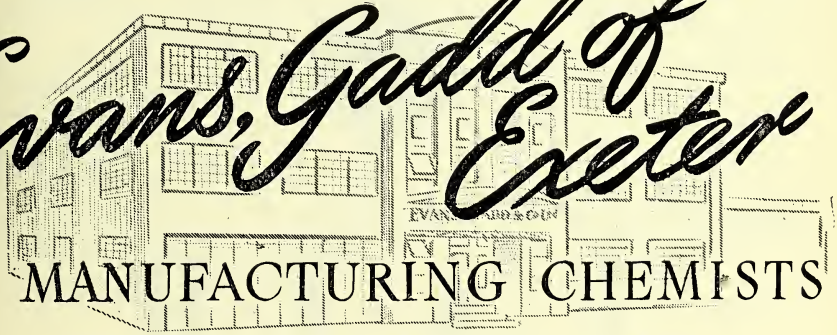
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'Tineafax' Ointment complies with the twin essentials for effective treatment of "athlete's foot," ringworm of the body, "dhobie itch" and other tinea infections—ability to penetrate skin, and strong but non-irritating antifungal effect. 'Tineafax' contains no mercury Its fungicidal agents, chief of which is zinc undecylenate, are incorporated in a special ointment base which carries them through the skin to the most deep-seated spores. In the majority of cases the condition will clear in 7 to 21 days. For after-treatment, and prophylaxis in persons exposed to infection, 'Tineafax' Powder should be used. Dusted on to the feet and into socks and shoes, it prevents growth of the fungus.

'Tineafax' Ointment is available in tubes of 1 oz. (approx.) and 1 lb. jars, the Powder in sifter-top tins.

'TINEAFAX'

COMPOUND UNDECYLENATE OINTMENT AND UNDECYLENATE POWDER

BURROUGHS WELLCOME & CO. (The Wellcome Foundation Ltd.) LONDON

F

SUBLINGUAL ABSORPTION

FROM

CIBA
'LINGUETS'

Can DOUBLE the effectiveness of the ORALLY ACTIVE Hormones

Effective · Economical · Convenient

Perandren 'Linguets' contain Methyltestosterone B.P.
Lutocyclin 'Linguets' contain Ethisterone B.P.
Eticyclin 'Linguets' contain Ethinyl Oestradiol B.P.
Percorten 'Linguets' contain Deoxycortone Acetate B.P.

CIBA

'Perandren', 'Percorten', 'Eticyclin', 'Lutocyclin', and 'Linguets' are registered trade marks : Reg. user

CIBA LABORATORIES LTD.
HORSHAM · SUSSEX

Telephone : Horsham 1234. *Telegrams : Cibalabs, Horsham.*

24/1

The best of its kind, always 'above' the average





Normo-Gastrine

. . . neutralises acidity in 20 minutes

An elegant and palatable Aluminium Silicate preparation.

Packed in boxes of 50 tablets, retailing **2/3**
Tax included

14/6 per doz. plus $\frac{1}{3}$ tax

BURGOYNE BURBIDGES
Established 1741. & COMPANY LIMITED. **LONDON. E.6**



The
BEATSON MEDICAL

A bottle of quality. The retention of the vial lip for easy pouring is combined with all the advantages of modern design, including the elimination of internal sharp corners allowing rapid dispersal of sediment.

★ *Plain or Graduat*
Cork Mouth or Screw Capp

BEATSON, CLARK & CO. LTD
MANUFACTURERS OF CHEMICAL AND MEDICAL GLASS
ROTHERHAM • *Established 1751* • YORKS.

(R) B.C67

C.V.B
CARR'S VITAMIN B_1
PREPARED WHEAT EMBRYO

A RICH NATURAL SOURCE OF VITAMINS B and E

TWO SIZES
1/9 or 3/-

Trade 16/- doz. or 27/- doz.
FREE NON-RETURNABLE CARTONS

From Principal Wholesalers or from the Manufacturers

CARR'S CEREAL PRODUCTS LTD
CARLISLE

Ladies' Overalls

COAT STYLE. Made in strong and hard-wearing Drill, with long sleeves. button front and belted. Available in Green, Beige, Grey, Pink, Sky, and Rust Red.

S.W.	W. & W.X.	O.S.
27/-	29/2	32/3

WRAP-OVER STYLE. Obtainable in strong White Drill.

S.W	W. & W.X.	O.S.
22/11	25/2	28/8

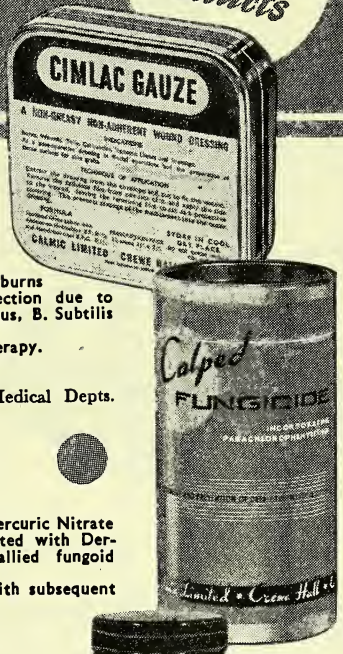
All the above are Utility and fully shrunk.
(Prices subject to fluctuation)

Postage and Packing 1/- extra. Please state size and second colour choice when ordering.

GARDINER'S
1, 3 & 5 COMMERCIAL RD., LONDON, E.1
(Opposite Aldgate East Station)
Telephone: BIShopsgate 6751/3
Gardiner & Co. (The Scotch House) Ltd.

In line with modern therapy

3 Calmic Products



CIMLAC GAUZE

NON-GREASY, NON-ADHERENT

Reports on clinical trials indicate that remarkable esults are obtained in the healing of chronic ulcers, wounds, burns nd carbuncles, and that rapid control is obtained of infection due to læmolytic Strep., Strep. Viridans, Staph. Aureus, B. Pyocyaneus, B. Subtilis nd B. Proteus.

Cimlac Gauze is compatible with systemic antibiotic therapy.

ACKS. Prescription: Boxes of 12 pieces 3½" x 3½"
Hospital: Boxes of 24 pieces 4" x 3½"

vailable only to Hospitals, Private Practitioners and Medical Depts. Industry.

CALPED FUNGICIDE

UNGICIDAL AND FUNGISTATIC

The combination of Parachlorophenylether and Phenylmercuric Nitrate Calped provides rapid control of pathogenic fungi associated with Der- atophytoses, Tinea, Pruritus Ani, Pruritus Vulva, and allied fungoid fections.

Rapid relief from itching and irritation is obtained with subsequent aling of the lesions.

Available as a cream or powder.

CKS. Calped Powder: 4 oz. drums.
Calped Cream: 1 oz. jars.

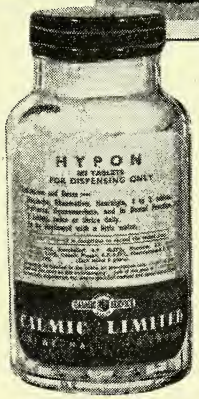
HYPON TABLETS

NALGESIC AND ANTIPYRETIC

The side effects of depression and constipation often ociated with the administration of analgesics are avoided by e inclusion of Phenolphthalein and Caffeine in a balanced formula ntaining:—Acid, Acetylsal., Phenacet., Caffein., Codein. Phosph., enolphthalein.

Indications: All conditions where an analgesic is indicated, d as an Antipyretic in cases of Influenza, Acute Rheumatism, nsillitis and Coryza.

CKS. Screw Capped Bottles:
50, 125, 250, 600 and 1,000 tablets.



ALMIC LTD. · CREWE HALL · CREWE

Area Distributors and Stockists in the Counties of

LTSHIRE, GLOUCESTER, OXFORD, BERKSHIRE, DORSET, DEVON, SOMERSET and CORNWALL

MESSRS. J. R. GIBBS LIMITED

NOR AVENUE · PAIGNTON SOUTH DEVON. TELEPHONE: 82282 (3 lines

Velouty
de DIXOR
The ORIGINAL combined
POWDER CREAM

Now in jars...



... the centre of attraction

★ IVORY
★ NATURAL
★ PEACH
★ SUNGOLD
★ OCHRE

2/6 RETAIL inc. tax

Attractive display cartons of six jars

From your usual wholesaler or direct from

DIXOR LTD.
ST. LEONARD'S WORKS,
MORTLAKE, S.W. 14.



HARD-SELLING
ADVERTISEMENTS
TO BOOST YOUR SALES

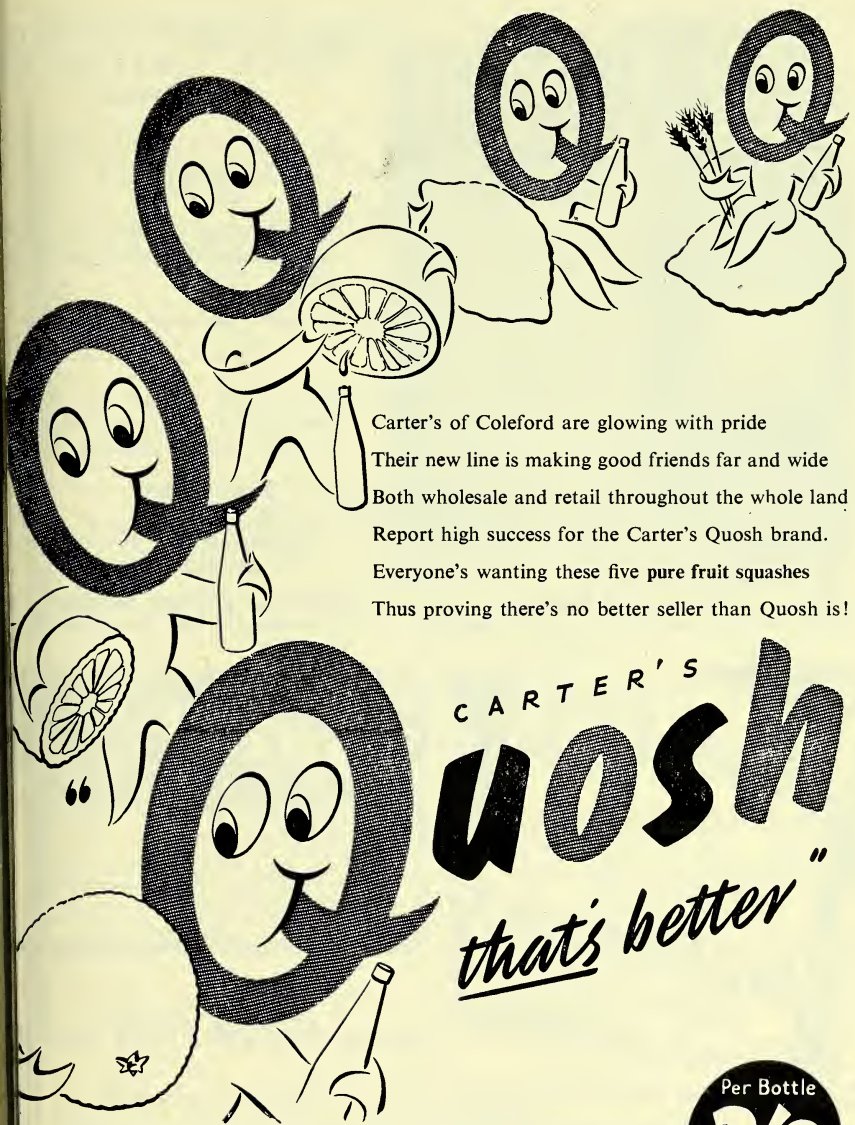
These are just two of a series of high-powered hard-selling advertisements appearing in the National Film magazines. Designed to appeal to a new, wider market, they are bound to build Hollypax sales—everywhere. Be sure to reap **YOUR** *share of the resultant profits!*

STOCK — DISPLAY — AND **SELL**

holly-Pax
FROM HOLLYWOOD★

Modern Internal-Type Sanitary Protection

Sole Distributors: FASSETT AND JOHNSON LTD.
86 CLERKENWELL ROAD, LONDON, E.C.1



Carter's of Coleford are glowing with pride
Their new line is making good friends far and wide
Both wholesale and retail throughout the whole land
Report high success for the Carter's Quosh brand.
Everyone's wanting these five **pure fruit squashes**
Thus proving there's no better seller than Quosh is!

CARTER'S

"Quosh that's better"

QUOSH Orange, QUOSH Lemon, QUOSH Grapefruit, QUOSH Lemon Barley and QUOSH Lime Juice — these five **pure fruit squashes** backed by nationwide publicity and a full range of sales aids, are making sales records. Ask for details of the generous trade terms.

Per Bottle **2/9** retail

H. W. CARTER & CO. LTD., THE ROYAL FOREST FACTORY, COLEFORD, GLOS.
'Phone Coleford 3201-5

CARTER'S OF COLEFORD, MAKERS OF **Ribena** BLACKCURRANT JUICE

W.R.4



THE SHAMPOO WITH SCALP PENETRATING ACTION

A NUCTA SPECIALITY PRODUCT

This attractive display stand carries the 8oz. Bottle which sells at 4/3½.

28/- per doz. plus tax

Also Full range of Toilet Specialities . . Violet Oil, Hair Lotion, After Shaving Lotion

Obtainable from your usual wholesaler or direct from the manufacturers :-

STEWART, GOODALL & DUNLOP LTD. 121a PRINCES STREET, EDINBURGH

1d. saves £££

A strip of Transoprint seals your packages securely against pilferers and makes tampering impossible. Experience proves it!



TRANSOPRINT STOPS PILFERING

better than an insurance policy — it saves your goods!

Write John Gosheron & Co Ltd Gayford Rd London W 12
or telephone SHEpherds Bush 3326

GOSHERON TAPES

SERVE INDUSTRY EVERYWHERE

Dyanese FADELESS DYES

2½d. STOCKING (except Black) 20/- gross
4d. COLD WATER, CURTAIN and Black Stocking Dyes 32/- gross
Order Dyes and Shade Cards from our Agents
Gt. Britain: W.B. Cartwright Ltd., Rawdon, Leeds
N. Ireland : T. McMullan & Co., Ltd., 42 Victoria St., Belfast. *Eire :* May Roberts (Ireland) Ltd., Grand Canal Quay, Dublin, C.6

ATTENTION!

We can supply

DRIED YEAST B.P.C.

THE DISTILLERS CO. LTD.,
12 Torphichen Street,
Edinburgh, 3

Hayfever, Insect Bites and Stings

'ROCHE' ANTIHISTAMINE

Different in chemical structure

from other antihistamine drugs now available

'THEPHORIN'

Trade Mark

DROWSINESS MINIMIZED

'Thephorin' is distinctive also in its properties: in the great majority of cases it is well tolerated and it very rarely produces drowsiness. 'Thephorin' can therefore be given during the day without inconvenience to the patient.

Tablets of 25 mg. in bottles of 50, 250 and 1000.
Also 5 per cent ointment in tubes of 1 oz.

Information and literature are obtainable from the Medical Information Department

ROCHE PRODUCTS LTD · WELWYN GARDEN CITY · HERTS

FOLDING CARTONS, LITHO and L'PRESS

RIGID BOXES, PLAIN and FANCY

PACKS FOR SPECIAL PURPOSES

DESIGNERS AND PRINTERS

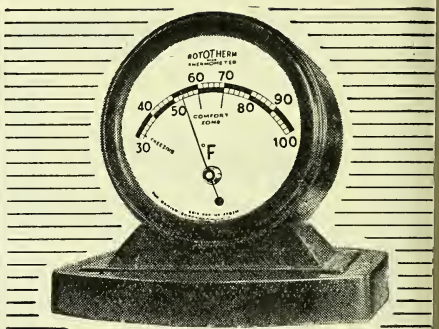
1842 • 1951

One hundred and nine years of service

J.S. & W.

The Packaging Specialists

JOHNS, SON & WATTS LTD
2-4 EPWORTH ST. LONDON, E.C.2
Phone: MONarch 7408
(THREE LINES)



THE 'MERTON' THERMOMETE

A sure seller at all times, this model forms the ideal and practical gift for desk or table use. Available in attractive Plastic case and choice of colours, also in hand-painted designs.

The world's best thermometer
Price 15/- Retail

Rototherm
DIAL THERMOMETERS

THE BRITISH ROTOTHERM COMPANY LIMITE
Merton Abbey. London S.W.19. Tele: LIBerty 340

WHAT CAN YOU RECOMMEND FOR RHEUMATISM?

Radian B Bath Salts (medicated) provide a pleasant way of applying the beneficial properties of our well-known Radian B Liniment to the whole body. Muscular pain, stiffness and weariness can be soaked away in the bath. Retails at 3/11½d.



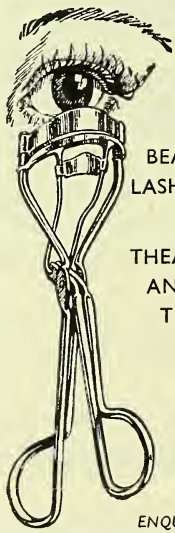
Radian·B
BATH SALTS

Specially prepared for regular use by athletes.

RADIAN MASSAGE CREAM
relieves pain and prevents stiffness.

Professional samples and literature on request from :

RADIOL CHEMICALS LTD.
78 Upper Richmond Road,
London, S.W.15. Telephone: VANdyke 2692



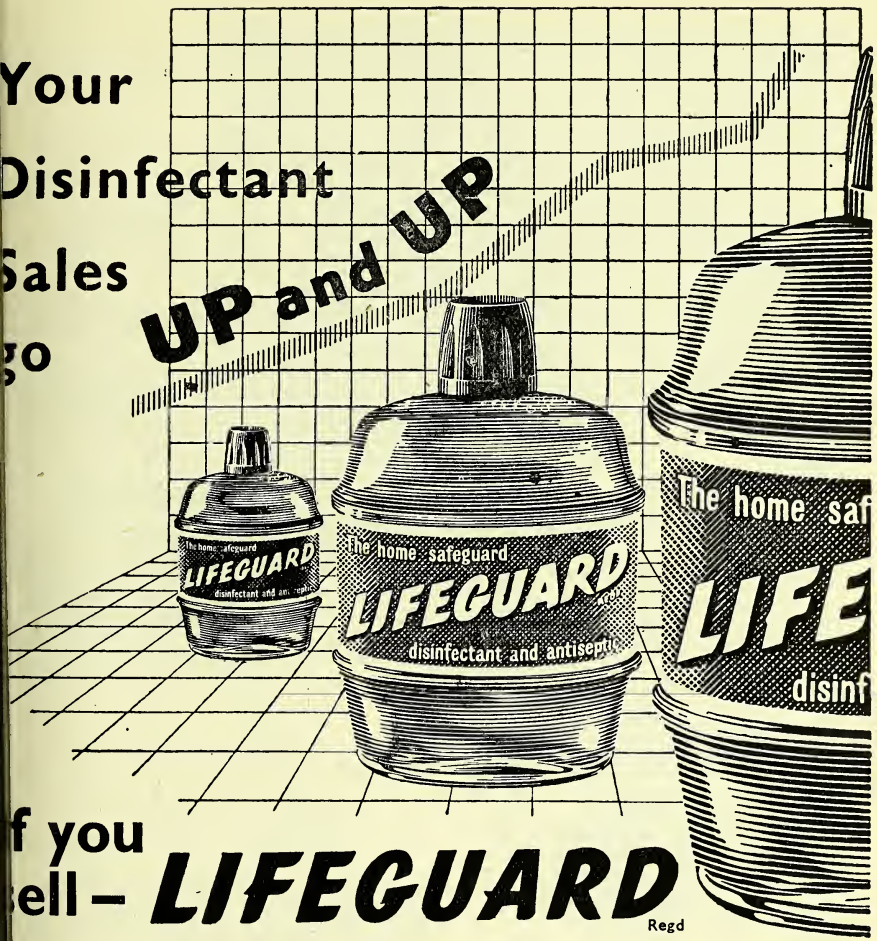
EYELASH CURLERS

BEAUTIFULLY CURLED LASHES IN A MOMENT

AS USED BY THE THEATRICAL PROFESSION AND BEAUTY SALONS THROUGHOUT THE WORLD

★ *SIMPLE AND EFFECTIVE*
★ *HARMLESS TO THE LASHES*
★ *NO HEAT REQUIRED*

ENQUIRIES :
Actual Manufacturers—
JAY GLAMOUR PRODUCTS LTD
23b EAST STREET, BRIGHTON, SUSSEX, ENGLAN



Quite one of the biggest advertisers in the disinfectant field is LIFEGUARD. All the year round, LIFEGUARD leads in forceful, sales-making advertising. LIFEGUARD is a great seller with 101 new uses.

LIFEGUARD PRODUCTS LIMITED · LONDON · E.C.4

GROSS PREMIER 144

Gross Cash Registers Ltd.
have the honour to announce that their Registers are being installed extensively throughout the
FESTIVAL of BRITAIN
Exhibition & Pleasure Gardens, in the restaurants and cafeterias

Demonstrations of these machines will be gladly given or a fully descriptive brochure sent on application to our London Showrooms at 140 Marylebone Road, London, N.W.1.



AN APPROVED METHOD OF
Family Planning

GYNOMIN TRADE MARK

The scientifically balanced, antiseptic and deodorant contraceptive tablet. Spermicidally efficient and recommended extensively by the medical profession.

Regular medical and national publicity will bring increasing demands to your pharmacy. Medical literature available to pharmacists on request.

SPECIAL QUANTITY DISCOUNTS MEAN EXTRA PROFITS.

3 doz.	tubes at 31/6 per doz. less	5%
6 doz.	" " " " " "	7½%
12 doz.	" " " " " "	12½%

Retail price 3/6 per tube of 12 tablets.
Order from your wholesaler.

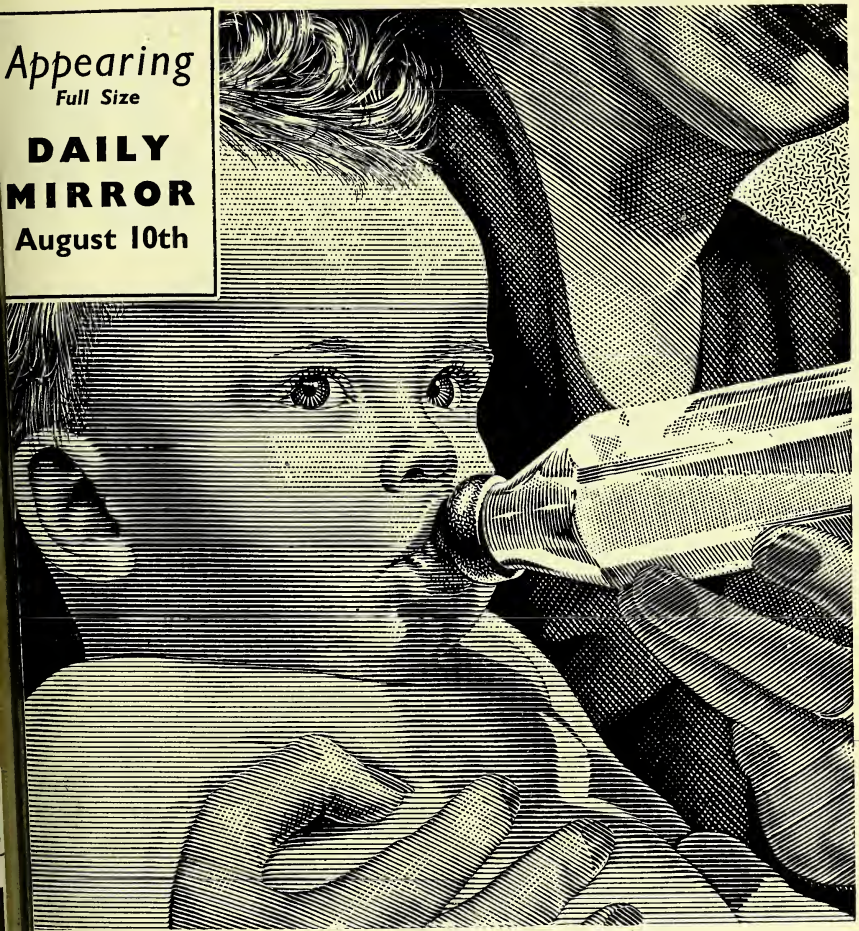
C&C LTD TRADE MARK

Manufactured by

COATES & COOPER LTD

PYRAMID WORKS · WEST DRAYTON · MIDDLESEX

Appearing
Full Size
DAILY MIRROR
August 10th



when the "MODERN" appeal goes over BIG to 8,000,000 potential customers!



THIS BOOKLET. offered to mothers and mothers-to-be through big spaces in top circulation papers during 1951 gives "Advice on MODERN Bottle Feeding" that will stimulate the sales of MODERN Teats to an even higher level! Take full advantage of this big opportunity and check your stocks now!

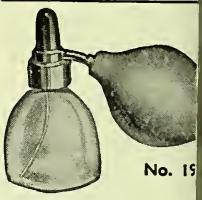
"MODERN" Anti Colic TEATS

CANNON RUBBER MANUFACTURERS LTD, TOTTENHAM, LONDON N.17

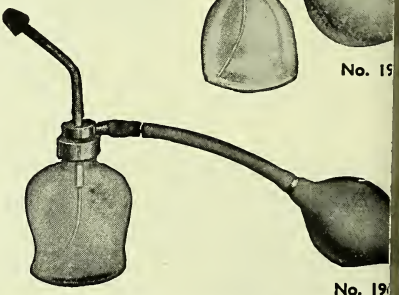
REGISTERED TRADE MARK
SAMCO
BRITISH MADE

Entirely British Made

N.H.S. Patter



No. 19



No. 19

SAMCO Atomisers and Sprays differ from types in general use in that each model is a Scientific Instrument specially designed to handle all types of spraying compounds without the necessity to adjust the nozzle of the Instrument in any way.

Each Instrument is manufactured and assembled to mathematically exact limits thereby assuring uniform performance.

Materials of the finest quality only are used and all components in direct contact with fluids are made of pure nickel, which is impervious to every known substance used in medical prescriptions.

All components are heavily chromium plated.

All SAMCO models are *pressure* operated, thus ensuring complete atomisation.

Supplies available from your usual wholesaler . .

ACTUAL MANUFACTURERS

S. MURRAY & Co. Lt

Phone: EUSton 1757 & 5514

45 ST. PANCRAS WAY . . . . LONDON . . . . N.

Recommend

Rayner's

Lembar

all the year hot or cold

Lemons

Glucose

Scotch Barley

Sugar



MADE BY RAYNER AND COMPANY LIMITED, LONDON, N.18

Travellers' Joy..

Millions more people will be travelling during this Festival and holiday season, and the demand for our Travel Sickness Remedy will be greater than ever. The pure gelatine capsules, each containing two tablets triturates, are easily swallowed whole, or, if necessary the tablets may be removed and crushed to powder. Accurate half doses are immediately available. Keep the attractive and convenient pack in view by showing this sales creating display on your counter.

Retail 1/3 per box, 1/9 per box.
Trade 9/- per doz.,13/- per doz.
Box free



JOHN BELL'S
Sea & Travel Sickness Remedy

JOHN BELL, HILLS & LUCAS LIMITED,
KFORD WORKS, WORSLEY BRIDGE ROAD, LONDON, S.E.26.

SPEEDFIX



Versatile SPEEDFIX, self-adhesive Cellulose Tape once again helps to present the products of industry to the public. You, too, can seal your packs with a colourful reproduction of the Festival of Britain official symbol—or we can print a special design for you, in one or two colours, on any one of several brilliant coloured backgrounds.

the Topical tape

FIX is A.I.D. Approved.
Now on Official Letterhead for Free Sample Roll
in red, white and blue (Approved by the Souvenir Committee).

STRIAL TAPES LIMITED, *Speedfix House, Duke's Road, London, W.C.1. Euston 3718 (3 lines)*

FRANK

MACOWAL & YANATAS

LTD.

MANUFACTURING CHEMISTS

invite enquiries for the manufacture of Pharmaceutical preparations, Liquids, Tablets, Vials, Ampoules and all sterile preparations.

WILLSHAW STREET, LONDON, S.E.14. Phone: TIDeway 3

FOR HOME & EXPORT

Tartaric Acid B.P.

Citric Acid B.P.

Ephedrine Hydrochloride

Hormones

Iodides

HARDY

★ *We can supply these and many other items advantageously.*

M·W·HARDY AND COMPANY (OVERSEAS) LTD

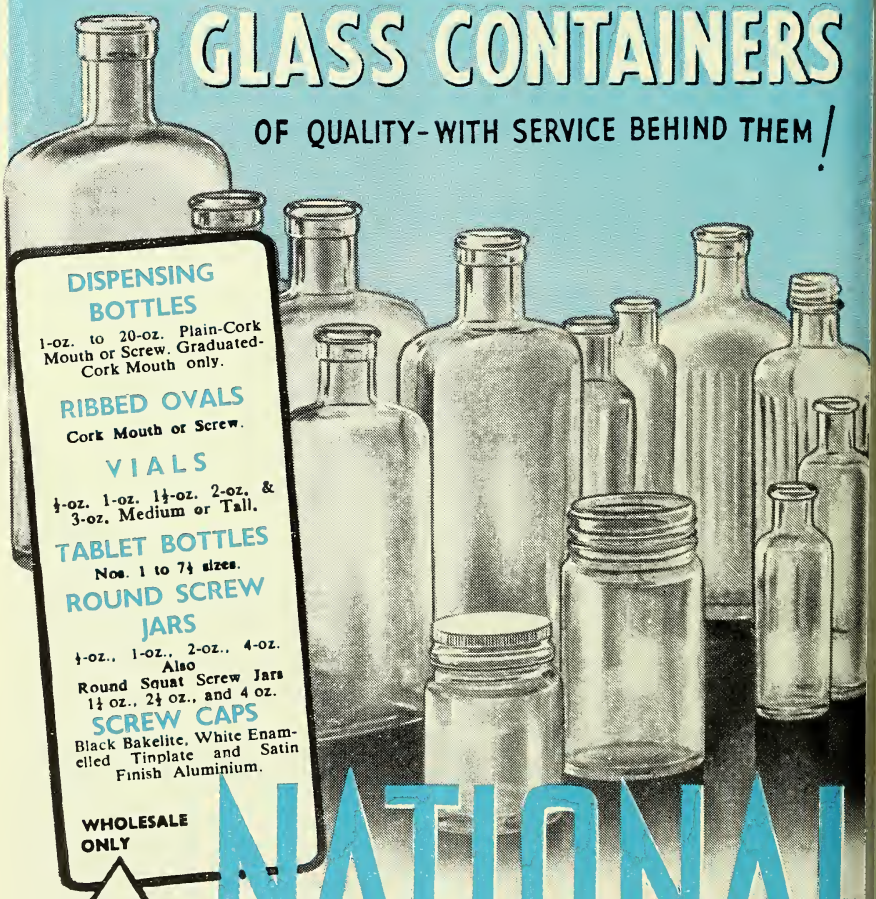
PINNERS HALL·GT WINCHESTER ST·LONDON·E.C.2

TELEPHONE: LONDON WALL 7131

WHITE FLINT

Medical and Pharmaceutical GLASS CONTAINERS

OF QUALITY-WITH SERVICE BEHIND THEM!



DISPENSING BOTTLES
1-oz. to 20-oz. Plain-Cork Mouth or Screw. Graduated-Cork Mouth only.

RIBBED OVALS
Cork Mouth or Screw.

VIALS
½-oz. 1-oz. 1½-oz. 2-oz. & 3-oz. Medium or Tall.

TABLET BOTTLES
Nos. 1 to 7½ sizes.

ROUND SCREW JARS
½-oz., 1-oz., 2-oz., 4-oz.
Also
Round Squat Screw Jars 1½ oz., 2½ oz., and 4 oz.

SCREW CAPS
Black Bakelite, White Enamelled Tinplate and Satin Finish Aluminium.

WHOLESALE ONLY

NATIONAL

TRADE MARK

NATIONAL GLASS WORKS (YORK) LTD

Fishergate, YORK
Tel. : YORK 3021

105 Hatton Garden, LONDON, E.C
Tel. : HOLBORN 2146

"I passed ~~by~~ buy your window"

Turning the passer-by into the passing-buyer

The International Chemical Company Ltd. spend thousands of pounds every month urging the public to go to their chemists for 'Anadin', 'Kolynos', 'BiSoDoL', and all the other members of the famous I.C.C. range of products — thus providing continuous support for the pharmacist. It is no secret that the stockists who obtain the most effective help from this support are those who devote space regularly on their counters and in their windows to the I.C.C. lines. Though the public know that they can buy, say, 'Anadin' from any chemist, the majority make their purchases *where the goods are actually displayed* . . . the passer-by is turned into the passing-buyer.

A recent survey revealed that the sales of one well advertised brand increased by as much as 35% while it was on display.

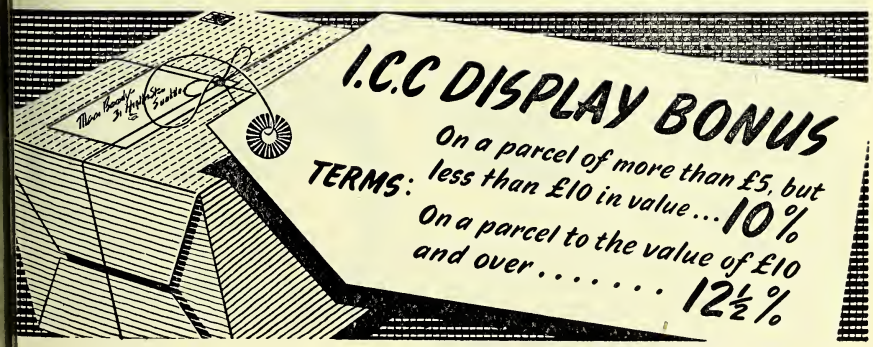
That is why the I.C.C. offer such a generous Display Bonus — one, too, that is paid in cash, not in goods.

Any pharmacist buying one of the mixed parcels of I.C.C. goods is entitled to an extra Display Bonus, on the terms outlined below, in return for his promise to display the brands for not less than 14 days following delivery of the parcel. Most pharmacists regularly claim this extra Display Bonus, but many of them do not take advantage of the excellent display material which the I.C.C. provide. Consequently when a display is given in return for the extra bonus it is not always as effective (or profitable) as it could and should be.

New and ever more attractive display material is being created continuously for the I.C.C. products, and our representative will be delighted to give you every assistance when he calls.

ICC INTERNATIONAL CHEMICAL CO., LTD.

CHENIES STREET, LONDON, W.C.1.





Higher Thermal Efficiency means HIGHER sales

VACCO vacuum flasks and vacuum jars have Higher Thermal Efficiency—a vital benefit that reduces temperature change to a minimum.

The Model S.C. flask is of 1 pint capacity and of pleasing design with a quality finish in durable enamel.

The VACCO jar Model J. 101 has a 3½″ wide mouth and a capacity of more than 2 pints. The canister is stove enamelled in green, blue or red, with an attractive crackle finish, and is fitted with a sturdy polished aluminium handle.

VACCO

MADE IN ENGLAND

Enquiries to:

VACCO LIMITED, Grosvenor Gardens House, Grosvenor Gardens, London, S.W.1

MACANDREWS & FORBES LTD
2 CAXTON STREET, LONDON, S.W.1

MANUFACTURERS OF THE WELL-KNOWN

APOLLO BRAND STICK LICORICE JUICE

V.B. BRAND BLOCK LICORICE JUICE

Supplies available on spot: duty paid for Home Market, Ex bond for shipment.

Telegrams: Macforbes Sowest London
Telephone: ABBey 4451-2-3

CANISTERS LTD



Invite Inquiries for

SPIRALLY WOUND CARDBOARD TUBES
up to ⅛″ wall

POSTAL TUBES AND TOILET ROLL CENTRES
also **COMPOSITE DRUMS**

FIR ST. WORKS
Heywood, Nr. Manchester



Protect your profit, prevent leakage, avoid errors and record all cash sales.

GLEDHILL

BRITISH MADE CASH REGISTER AND TILLS

G. H. GLEDHILL AND SONS LTD

28 TRINITY WORKS, HALIFAX

SURE-SELLING STOCK

OVER 150 YEARS REPUTATION

KEARSLEY'

THE ORIGINAL

WIDOW WELCH'S FEMALE PILL

9d. BOX PROFIT by ordering 1 d
3/3½ size. Bonus given on e
dozen (13). It pays to push this

C. & G. KEARSLEY L
71 Dartmouth Rd., London, S
Est. 1787

WHIFFEN'S

Fine Chemicals

QUININE

HYDROCHLORIDE
BIHYDROCHLORIDE
SULPHATE · BISULPHATE
ETHYL CARBONATE · TANATE
HYDROBROMIDE · FORMATE
ETC.



WHIFFEN & SONS LTD., FULHAM, LONDON, S.W.6
FINE CHEMICAL DIVISION OF
BRITISH CHEMICALS & BIOLOGICALS LTD.

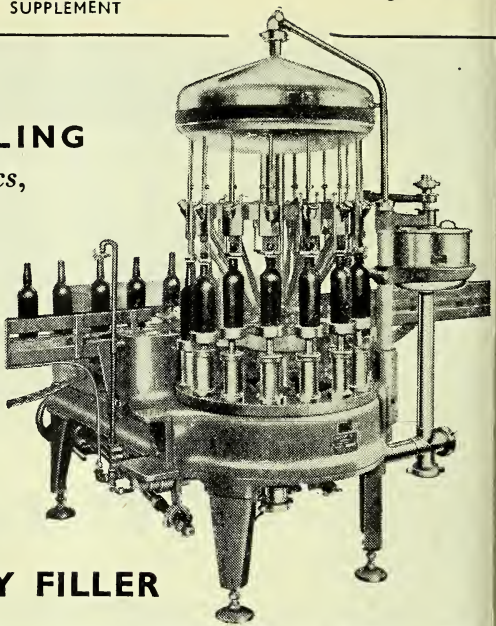
Phone: RENown 3416
Telegrams: Whiffen, Walgreen, London

FAST . . .

FOOLPROOF FILLING

for Medicines, Antiseptics, Lotions, etc.

- ★ Fully Automatic
- ★ Foolproof valveless vacuum-operation
- ★ 15 Heads—Output up to 100 bottles per minute
- ★ Full details on request



ALBRO

VACUUM – OPERATED

15 - HEAD ROTARY FILLER

ALBRO FILLERS & ENGINEERING CO. LTD., Wharf Road, Ponders End, ENFIELD, Middx.

I took VULFIX straight on the chin!



And I kept it there, whipping up a whis wilting lather in a wink !

VULFIX "SERVICE"

obtainable through all wholesalers

Retail at 4/6, 6/9, 7/6, 9/6, 12/3, 12/6 and 21/- each

THE BRUSH WITH THE TWO YEARS GUARANTEE



VULFIX PURE BRISTLE *Shaving* "Service" **BRUSH**

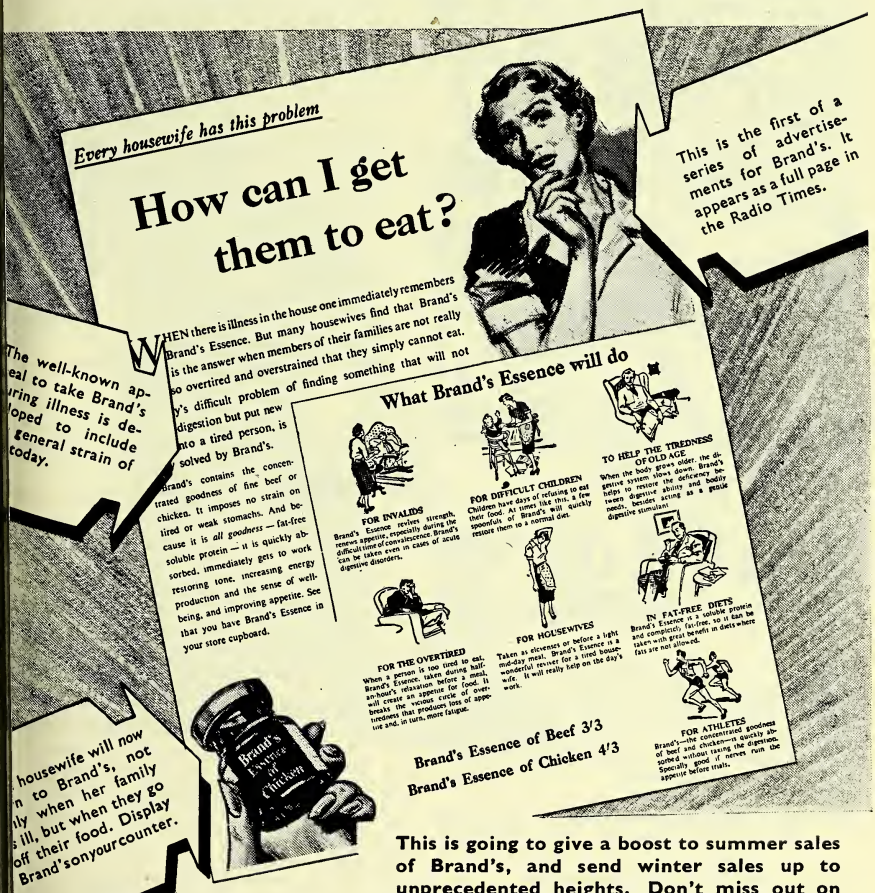
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This is the first of a series of advertisements for Brand's. It appears as a full page in the Radio Times.

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about

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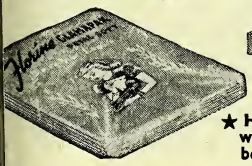
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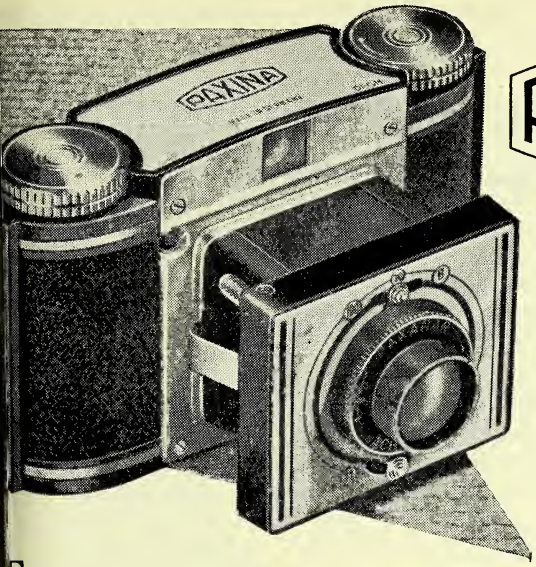
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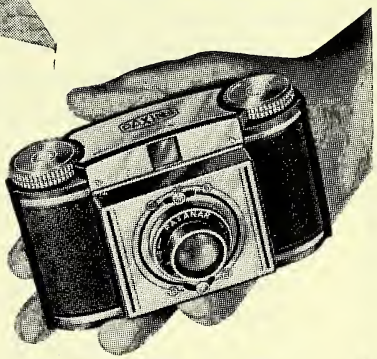
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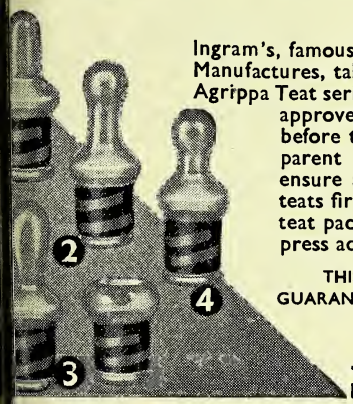
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